<210> 61
<211> 1705
<212> DNA
<213> Homo sapiens

<220>
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<222> (779)
<223> n equals a,t,g, or c

<400> 61
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<210> 62
<211> 1031
<212> DNA
<213> Homo sapiens

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<210> 63
<211> 1589
<212> DNA
<213> Homo sapiens

<400> 63
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gcaaaaaaaa aaaaaaaaaa aaaaaaaaa 1589

<210> 64
<211> 1088
<212> DNA
<213> Homo sapiens

<400> 64
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aaaaaaaa 1088

<210> 65
<211> 1256
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1079)
<223> n equals a,t,g, or c

<400> 65
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<210> 66
<211> 1602
<212> DNA
<213> Homo sapiens

<400> 66

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<210> 67
<211> 938
<212> DNA
<213> Homo sapiens

<400> 67
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<210> 68
<211> 1585
<212> DNA
<213> Homo sapiens

<220>
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<222> (904)
<223> n equals a,t,g, or c

<400> 68
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<210> 69
<211> 1676
<212> DNA
<213> Homo sapiens

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<210> 70
<211> 1344
<212> DNA
<213> Homo sapiens

<400> 70
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aaaaaaaaaa aaaaaaaaaa aaaa 1344

<210> 71
<211> 1474
<212> DNA
<213> Homo sapiens

<400> 71
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tataactcaa gaaactcaag ttatatatat atgtcaagaa atgtatgatt attttggaga 180
gaatgggccc aaatgtgaaa aagatataaa aaaaacaaaa aaaacaaaaa aaaaacacta 240
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aattgttata tctctatcct ttttgctttt ctctgtgttt ttaatgtatg gaataaatct 660
cataaataga aagaaaaata atctagaaat ttttcaaagc tagtactctt tctccttata 720
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<210> 72
<211> 2012
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1468)
<223> n equals a,t,g, or c

<400> 72
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gttcatccct cccttcctgc tgatcttcta ttgtctccat agttttgtct tttcccaaat 360
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cttccaagtt ttgtcaataa agctgctttg taaacatcca tgtgcaggtt tttgtgtgga 600
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cctgtaatcc taacactttt ggaggccaag gtgggagaat cgcttgagcc tgggaggtcg 1920
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<210> 73
<211> 1267
<212> DNA
<213> Homo sapiens

<400> 73
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cactgtaggg cgtgaggggt gagtagctgc tggcctccaa gtccatagct actcatgttg 480
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tgaaaatcat aaggaggtac cactttgtac ccttaaaaat agttactaca aaaaaaaaaa 1260
aaaaaaa 1267

<210> 74
<211> 1748
<212> DNA
<213> Homo sapiens

<400> 74
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tcttattttt gaactcctaa actttctggt agaaatcttc agttgaaaat atcctggcaa 180
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ttgtgcccaa cattcttttc cacatacttg cccaaattgg aaaactaggg ttctaagttt 300
ccccctccat ccatgcccac atttaattca ccctaataat acctgacatc tttcaagttc 360
attttctact atctatcccc acgcaggcca tatctgggtt gaagcttcat tatctctata 420
gattaaaaac aaaaacaaaa tgcatacaag caaaacaaat aacatacaaa caaaacccac 480
ctaactcatc tttatgtagt cagtcctccc tcaatagttt ggccaaactt cctaaaccga 540

aatctgattg tgactatccc cttctaaatg tatttaatca gcataccct tcaataaatc 600
cattaaccgt tcttgttatc caagacagtt tgtcatctgt cttggataac aagttgcaga 660
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catttaaaat cattttgtt aagactacaa aatgattttg ggtaaaaaaa aattttacca 1620
aatatcaaga tcacaataat cacttaaaat agttacatat gtaactaacc tgcacaatgt 1680
gtacatgtac cctaaaactt aaagtataat aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1740
aaaaaaaa 1748

<210> 75
<211> 1570
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<400> 75
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cgtacccatg tgtcaacatt tcatatatcc agttctttgg gtgctggttc actttttttc 120
atttattcaa attcagaaaa atacggacgg atctaatgtt aaattaacca gaaaccctgg 180
aacattcata tcttgagagg gaatttgcta ctcttttact tttgggattt cattataaaa 240
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tctctagcaa agagtggagg gtggagggtg tgtagaactc cactcagcct catggataca 360
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aaagaaggag gtttaaagca gagtattgtt ggcagccagc tatgcccatc ctcttgtaaa 480
taactttcca acacacccat ttccttgcct taaggtgcag gttcctactt ctacaaaatt 540
tcaaatgatt gcaggtcaaa aacctttgga gttactcaca aataataata aaatttcaaa 600
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gggcggccgc 1570

<210> 76
<211> 524
<212> DNA
<213> Homo sapiens

<400> 76
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gcccggtgtg ttggcaacaa ctggatctga agatggcagt cagggtgctt tggggtggtc 180
tcagcctgct ccgagtgctg tggtgtctcc ttccgcagac gggctatgtg cacccagatg 240
agttcttcca gtcccctgag gtgatggcag gtaaaactcc gcatgtgtgg ctgagacaag 300
ctgcagcaga gtctgcttga gaagctgacg ggagactttg tggggaggga gtagcatgtc 360
tgggtagatg agtagtaaat ccacaagcag agcagcagcc tctctctctg gggtaagaac 420
ttggaagtgg ggacttcata tctccttccc gagtggtgac actgaccttc tgggtaatgc 480
taataaacca ccagtctctt tgatgtaaaa aaaaaaaaaa aaaa 524

<210> 77
<211> 1306
<212> DNA
<213> Homo sapiens

<400> 77
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atcttcaacg cttcctacaa gaagtaccta gatagggagt gggaggaaga gccactcagg 180
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<210> 78
<211> 1479
<212> DNA
<213> Homo sapiens

<400> 78
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tcatgcccct ccaattacct ctccagcttt tactacttag gttaatttgt gaattctttc 180
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atcttcagct ttcagagttg aatattctgt aggtggcttc atatgtcatt cattccgtct 360
tctcagttta ttcttaaata tgacccaact ccagccttta tcccaattta tactacctct 420
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<210> 79
<211> 1794
<212> DNA
<213> Homo sapiens

<400> 79
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ttcaacttga ttgcttcctc ttgggttctg tgtttcccac tgtgtgacct gagctgtcag 180
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<210> 80
<211> 1280
<212> DNA
<213> Homo sapiens

<400> 80
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<210> 81
<211> 974
<212> DNA
<213> Homo sapiens

<400> 81
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<210> 82
<211> 1955
<212> DNA
<213> Homo sapiens

<400> 82
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agaaaatatt ttttgtattg attacatgtt gaaacaatat tttggctata atgggttaaa 1920
tatactatta aagttgaaaa aaaaaaaaaa aaaaa 1955

<210> 83
<211> 638
<212> DNA
<213> Homo sapiens

<400> 83
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cagtttgtct cgctgtgtag gcataagcta atggtttatt ttcagaaagc tgcctgaaac 480
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actttctcgt aaaagttaaa aaaaaaaaaa aaaaaaaa 638

<210> 84
<211> 859
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (27)
<223> n equals a,t,g, or c

<400> 84
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cccaatgcca ccctcattct ggccatcggc gctttcaccc tcctcctctt cagtctgcta 180
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tggcccactc cacccacccg cccagccccg gccccgtgcc atgccaacac ctctatggtc 300
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<210> 85
<211> 1129
<212> DNA
<213> Homo sapiens

<400> 85
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tgagagcttt atttgtctcc ctctgatagc aaaaaaaaaa aaaaaaaaa 1129

<210> 86
<211> 2674
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2607)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2611)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2621)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2634)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2650)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2660)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2669)

<223> n equals a,t,g, or c

<400> 86

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<210> 87
<211> 1636
<212> DNA
<213> Homo sapiens

<220>
<221> SITE

<222> (1624)
<223> n equals a,t,g, or c

<400> 87
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<210> 88
<211> 1639
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> n equals a,t,g, or c

<400> 88
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ccacttgtcc cttatttctg atgctgatca caagamctar gttattttgc cggtgattct 1200
gactgactgg ctattaatta gggtttctgt gacccactcc ttgggttcaa ttaatttgct 1260
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attggtcatt ggtgatcaac ttaaccttca gcccttctcc cctcccggag gttggagggt 1560
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agctcactag tcggcggcc 1639

<210> 89
<211> 1860
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1846)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1848)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1853)
<223> n equals a,t,g, or c

<400> 89
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gttcccaggg gcctgggccc agggccatgt cccacccggc tgcagccaag gcctcaaccc 180
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tcttgctcct ctgtgaggaa caagggtgcc taataaatac atttctgctt tattaaaaaa 1800
aaaaaaaaaa aaaaaaactc gaggggggggc ccgtacccaa tcgccngnga tgntagtata 1860

<210> 90
<211> 839
<212> DNA
<213> Homo sapiens

<400> 90
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caagtcattg agagtctgta ccaaaagcta catggaaggc catgggaaaa cccgggtgcc 180
agtggttcta gtggggaaca aggcagatct ctctccagag agagaggtac aggcagttga 240
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tcagctgact caaggcatct tcaccaaagt catccaggag attgcccgtg tgggagaatt 360
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tgcttctgcc cccggcactt gccatgttcc agtgggggggc agatcctcag gacttcacgg 480
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catggacact ggcctctagc cctctgtttt tgtttgatga attctgttat aacctatggg 660
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gtgttggctg ggtaagggga gccggggact tctgaaatag agctggctcc ctggggtgac 780
aatgtatata tgcaaataaa ttgagaaatc ttttgttgtt gaaaaaaaaa aaaaaaaaa 839

<210> 91
<211> 1145
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (386)
<223> n equals a,t,g, or c

<400> 91
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gtgtcattta ctgttactgt agtaattaat gcctttggaa gaatcttttg aaatagttct 120
caaattggta ccactacttg gtttggaatt attttttttt cttttcataa tcaatggtta 180
tataaatgta tattgtccta gtcagtattt tatatatgct aaggactcac tagctggctt 240
ggcactaata cctcaataaa aggaatactt cttttggaat catgaaacaa aagtgartaa 300
acctccaagt tatttttcca accaaccttc tttgaaaaat cttggatgag tcactcaaat 360
caagacatgt tataaaatta tctgtnattt tggtagaaca tatacattgt yctaataata 420
atttycaaat attcagtgka acygtaagka tgagaataca ggttgaatat cycttatcca 480
aaatgcttgg gaccagaagt cttttggatt ycaaattttt aaatatttac atcatactta 540

ccagtttaac atccctaatt caaaaattca aaattcagaa tgctccaata atcgtttcct 600
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taggaagact caacttgtac tatcattcta tagactttat gattgggtag actacatgag 720
tattgaaccc agaaatcatt gtctagcaaa agccagtata gtgattaatt accctgtgac 780
tattatataa tgttcaaaaa agctaacata ttagaatgtc cttagcgtgc agagagcaaa 840
cagagacaaa aagaaaagtt accctgaaaa gtttgtcaga aaaatagaat atcagacgct 900
raactactca tccagaattt tgtcraaaaa gaaaaataag ataaaattca ctggtagaca 960
aaaagtagta acataccagt ttgtaatttc tcagtttcaa accatgaata tgtatttgta 1020
taccaaaaat catttcagga gtcagagaag gaggatatgc cttttatgtg gagactttaa 1080
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cctgt 1145

<210> 92
<211> 2050
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (515)
<223> n equals a,t,g, or c

<400> 92
aagaatggca taaattcatc cagcttctta cagaattcca aatgcggaat gtagattttt 60
tatatagtaa tcttgagttt attctaccat taccagttga taccattcca gaaactaaaa 120
acttttgtgg cccatcagta actgtggatg ccagtgcagc aacaaaaagt atgaattgtc 180
ttgctaggaa acactctgaa agagaacagc cattgaaaaa gtcccagaaa aagaaacaaa 240
agaaaacatt ggtaatatta gatgatagtg atctatttga cactgacttg gactttcctg 300
atcaatctat tagcctgtcc tctgtatcat cttcctcaaa tgcagaagaa agcaaaaccg 360
gagacgaaga aagcaaagcc agagacaaag gaaacaatcc agagacaaag aaatctattc 420
cttgtcctcc taaaacaact ggcaggaaaa aaatgttctg ccctgtttct cattgtttaa 480
attctctctc tgagttcatg ggataacatg tcctncttag atgcactttt aactgatgta 540
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ggactttgtg atgagtttag tcttgagagt aatgatggat ggacttctca aagctctgga 660
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gtgggtaata gacaagctag tataattgaa tacctgccaa cccttcgaaa catctgtaag 960
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attcatcttg acattccaaa agagactgtg aatactttgg cagctgactt cccttaatgt 1080
tccatactaa caatgctttg tatagattat catgtggtcc ttaagataca ttttttatatt 1140
atgtggatct tcatggaaaa gtatatttct cgatgtacat tttaaacaaa caatttgtat 1200
atttttttat tggcgggtaa atatttaaaa tatttgagtt acaaatttta tatatgattg 1260
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tcaagtgatc catctgcctc ggcctcccaa agtgctggga tcacaggcgt gagccacctc 1860
acctggccta tattgtacag ttttgaacag tatagatgca tacctgttta caaatgtgta 1920
tgaagataga tatttttacc tcttatttgt tcaatttact ttktcttgta ttaattagta 1980

tattgatcta attaaaggtt aaagctaaag gctttatgaa atgtttaaaa aaaaaaaaaa 2040
aaaactcgag 2050

<210> 93
<211> 1173
<212> DNA
<213> Homo sapiens

<400> 93
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ggtcagagca tctcgctgtt tttttgttgt tgttttaaaa tattatgatt tggctacaga 180
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ccggtttcgg cacagcccgg tcactcacgg cctcgctctc gcctcacccc ggctcctggg 300
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ctctctggtg gccgcccctg tgcacctggc caggggaagc ccgggggtct ggggcctccc 420
tccgtctgcg cccacctttg cagaataaac tctctcctgg ggtttgtcta tctttgtttc 480
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cagcctgggc tatatagcaa gaccccatca ctacaaattt tttacaaatt agctaggtgt 1020
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ccaggaggtt gaggctgcag tcagctcaga ttgcaccact gcactccagc ctgggcaaca 1140
gagcgagacc cggtctccaa aaaaaaaaaa aaa 1173

<210> 94
<211> 822
<212> DNA
<213> Homo sapiens

<400> 94
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tcccaacagg aggacctgcg cttccctggg atgtgggtct cattgtactt tggaatcctg 120
gggctgtgtt ctgtgataac tggagggtgc attatctttc tgcactggag gaagaacttg 180
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acgggccctg cccctgctgt caccaagact gagactgagg tccagaatcc agatgttctg 360
tgggatttgg acatccccga aggcaggagc catgctgacc aagacagcaa ccccaaggcg 420
gaagcccctg ctcccctgca acctgcactg cagctggctc cacagcagcc ccaggccaga 480
tccccattcc cacttcccat ctttcaggag gtgccctttg ccccaccctt gtgcaaccta 540
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ccttcagaac tgtagcctcc tctcactgaa ggtgggagct gcaggaatca ggtgcagagt 720
aggaaatgga actaacctca ggaaggtggt attgacagaa gtcaggaccc acctggatgt 780
catgctatga aacatttgaa gcaaaaaaaa aaaaaaaaaa aa 822

<210> 95
<211> 1077
<212> DNA

<213> Homo sapiens

<400> 95
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caagaagcag aagaagaaaa cagactcctg atagttcagg atgcttcaga gagggcagca 180
cttatacctg gtggtctttc tgatggtcag ttttattccc ctcctgaatc cgaagcagga 240
tctgaagaag ctgaagaaaa acaggacagt gagaaaccac ttttagaact atgagtacta 300
cttttgttaa atgtgaaaaa ccctcacaga aagtcatcga ggcaaaaaga ggcaggcagt 360
ggagtctccc tgtcgacagt aaagttgaaa tggtgacgtc cactgctggc tttattgaac 420
agctaataaa gatttattta ttgtaatacc tcacagacgt tgtaccatat ccatgcacat 480
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gcctgaagtg ttggacttgc aaaaggggaa gaaaggaatt gcgaatacat gtaaaatgtc 900
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tgcgttcagc caatttcaat taaaatgaac taaattaaaa aaaaaaaaaa aaaaaaa 1077

<210> 96
<211> 2092
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (637)
<223> n equals a,t,g, or c

<400> 96
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gccctggggg acaacgtgaa acaatactgg gctaacctaa agctgtggtt caagcagaag 120
atcagcaaag aggagtttga ccttgaagct catagacttc tcacacagga taatgtccat 180
tctcacaatg atttcctcct ggccattctc acgcgttgtc agattttggt ttctacacca 240
gatggtgctg gatctttgcc ttggccaggg ggttccgcag caaaacctgg gaaaacccaa 300
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actttgttcc cacacaatga tgcttcccac tcgaggccag cttgaaggga gaatgatagt 480
gactgcttat gagcatgggc tggacaatgt caccgaggag gctgtttcag ctgttgtcta 540
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atggctgtat agatatgtat atatggttca cayatctgga tctgtgtatt tgattttgta 2040
ctttaaatgt gacaaataaa ccttttggga gaaaaaaaaa aaaaaaaaac tc 2092

<210> 97
<211> 1352
<212> DNA
<213> Homo sapiens

<400> 97
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aaatgccaaa gacttgcctt ccaattctct gtctacctct aactcaggct gttgtcttgg 180
cacagttaaa caacttttct agcctcaata ttttcatctt caaaatcaaa aataaaatgt 240
attacatatg gatctatgac aaatagtgat atattccatg tgcacgttat cattaaacat 300
gaattaacca atatttaaat ctttttttct ttttttttct ttttgagacg gagcctgggc 360
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aatgaggtca ttagggtggg ccctaattct aattcagtac aactgatgtc tttattagaa 480
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gagaaaataa atttctgttg tttaagccat tcagcttgtg gaacttttat atgatgactc 720
tggcaaacta atatggcatt acacacaggg gataagaaaa taatccaaat aagtatatgt 780
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tgtgtctata ttggttaacc ttttcttatc tgaaatacaa atgccacatg atctcactta 1140
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ggtttacttg agagagaagg gtgggagaag ggtgagggtg gaaaagatac ctattgggta 1260
ctatgctcac tacctgggtg atgaaatcat ttgtacacca aactccagtg acacacaatt 1320
tacttatgta gcaaacctgc acaaaacaac cc 1352

<210> 98
<211> 913
<212> DNA
<213> Homo sapiens

<400> 98
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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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tgtggaatct gttccttagc tctgattttt tattcttatg gagcgtctta ggttactaca 180
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<211> 1731
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 1303
<212> DNA
<213> Homo sapiens

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<211> 1516
<212> DNA
<213> Homo sapiens

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<210> 107
<211> 1689
<212> DNA
<213> Homo sapiens

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<211> 1943
<212> DNA
<213> Homo sapiens

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<210> 109
<211> 1594
<212> DNA
<213> Homo sapiens

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<211> 1742
<212> DNA
<213> Homo sapiens

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aa 1742

<210> 111
<211> 1501
<212> DNA
<213> Homo sapiens

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<210> 112
<211> 791
<212> DNA
<213> Homo sapiens

<400> 112
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aaaaaaaaaa a 791

<210> 113
<211> 1637
<212> DNA
<213> Homo sapiens

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aaaaaaaaaa aaaaaaa 1637

<210> 114
<211> 1588
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (778)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1150)
<223> n equals a,t,g, or c

<400> 114
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<210> 115
<211> 1926
<212> DNA
<213> Homo sapiens

<400> 115
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ctattattat cctcattaat cattaggctt aggacacata aataatttcc ccagggccac 1860
tcagctagta atcacagaac tggagctcaa atcccctgca aaaaaaaaaa aaaaaaaaaa 1920
aaaaaa 1926

<210> 116
<211> 1063
<212> DNA
<213> Homo sapiens

<400> 116
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<210> 117
<211> 1615
<212> DNA
<213> Homo sapiens

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aagtacattt tgctgccatt tgtattgggc tgaagaaatc actattgtgt atatactcaa 1080
gtctttttat ttttcctctt ttcataaatg ctcttggaca ttattgggct tgcagagttc 1140
ccttattctg gggattacaa tgcttttatc gtttcaggct tcatttagc ttcaaaacaa 1200
gctgggcaca ctgttaaatc atgattttgc agaacctttg gttttggaca gtttcatttt 1260
tttggatttg ggatagatta cataggagta tggagtatgc tgtaaataaa aatacaagct 1320
agtgctttgt cttagtagtt ttaagaaatt aaagcaaaca aatttaagtt ttcttgtatt 1380
gaaaataacc tatgattgta tgttttgcat tcctagaagt aggttaactg tgtttttaaa 1440
ttgttataac ttcacacctt tttgaaatct gccctacaaa atttgtttgg cttaaacgtc 1500
aaaagccgtg acaatttgtt ctttgatgtg attgtatttc caatttcttg ttcatgttaa 1560
gatttcaata aaactaaaaa atctattcaa aacattaaaa aaaaaaaaaa aaaaa 1615

<210> 118
<211> 1221
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (697)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (700)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (701)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (712)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (720)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (722)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (742)
<223> n equals a,t,g, or c

<400> 118
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aaaataaatg tcagttgcca gagaaagaat agatcaaaca gtttatttga atttctgatg 120
agtttggtga ggaagtgtat agcacttaac atttggaagg cagacaaaag gttttgttgt 180
tggtgttatg ttccttttga attttagata cataatgcga ttttttttct ggccaatgct 240
ccaggcaaaa ttgatgtctt tccactttct aaaacccatc atatttatga actctctgat 300
actctgtctg aaacagtcgt gctcctgtga ggttgaaata tctctcctgc ctctatcaca 360
gcagacgcac agaactgatc tgggattttc tcactcagga tcccaaaatg agccctttct 420
caatcttgac aaacgtgcag cagaagccca ttgtgcagtt atggttctgt gcctgctggg 480
cagggattta aaggccagga gaagcaggga aggccctgct ctctgctcca gccaggtggt 540
aatatgcatt ctcaaactag ctaggaaaag gttctagatt cctttgaatc tattgctgaa 600
tcccactgat tagcttttcc cactgacaga cattcaaatc tttgtttttg gagcttcctc 660
tgcagacttg gtgtaaattt caaaaaaaga aaacaangcn ntgaagctta anacaggcan 720
anacagttgg cttcctacct angcatgctt caaactcact atatgacttg gtaaattctg 780
ttactttaat gcatgcttgt tttcacatgt gtaaaatgag agagtatcag actagatcat 840
ggatttgttt ccccctcttt tccccttctc tctcgaagag tagaaccctt taaattaaat 900
cttttataaa agttaagtgg ccgggagctg tggcccatgc ctgtaatccc agcactttag 960
gaggccgaag cgggtggatc acctgaggtc gggagttcaa gaccagcctg accaacatgg 1020
agaaaccctg tctttactaa aaatacaaaa aattaggcag gcatggcggt gcatgcctgt 1080
aatcccagct actcgggagg ctgaggtagg agaatcgctt gaacctggga ggcagaggtt 1140
gcggtgagcc gagatcatgt ccattgcact ccagcctggg caacaagaac aaaaatccgt 1200
ctcaaaaaaa aaaaaaaaaa a 1221

<210> 119
<211> 1149
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1120)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1140)
<223> n equals a,t,g, or c

<400> 119
gggtttctgg ggattggatt caaagagcag aagtatgatg ccaggggctg gtaaggactc 60
agccatatag agatttcagc tgcattataa tgtatatttg agaaattgag ttcttattat 120
cagaaaattg acctatgtaa tgaaatacta gaagaaaact ctaaattaga atggctttgt 180
tatgaatttt taatgataag tactaacact taaaagggaa aaaatttttc aaagaaaatg 240
cctaaaaatg tgttgtatct gagatcatca tatatgtagt attacagtgc aaacactatt 300
aatgttaatg aggtaggtgg attttttttaa tgaaaaaact tgaaatatta tcaggttgtc 360
cccatttatg gaatttaagc ttgtcagaaa gatccagata gctatattaa tattttatct 420
gtatttggtt gcggttgctt ttaaaaataa gttttcttat aagtcatttc aatttttttgg 480
tttagagtcc atatttcaaa ataaaaagtt aaaaaaaagag taccttatgt aatttagcaa 540
ggtattccat aaactcaggg aggaaaaaaa aaaaactaag atgagaggct agttataatg 600
atctttattt atatattgca ggaaatgatt tcctctctca caacttagca taatttactg 660
ctaatatttt tagccatggg ttgaaaaaaa ttaartggtt ttgtaagtgc taatcctttg 720
ttactcattt aaactggtaa aatgtagtcc ccgctccctg aggaggacct gtccaaactc 780
ttcaaaccac cacagccgcc tgccaggatg gactcgctgc tcattgcagg ccagataaac 840
acttactgcc agaacatcaa ggagttcact gcccaaaact taggcaagct cttcatggcc 900
caggctcttc aagaatacaa caactaagaa aaggaagttt ccagaaaaga agttaacatg 960

aactcttgaa gtcacaccag ggcaactctt ggaagaaata tatttgcata ttgaaaagca 1020
cagaggattt ctttagtgtc attgccgatt ttggctataa cagtgtcttt ctagccataa 1080
taaaataaaa caaaatcttg aaaaaaaaaa aaaaaaaaan gggsggccgc tctaaggggn 1140
tccaagctt 1149

<210> 120
<211> 1515
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (69)
<223> n equals a,t,g, or c

<400> 120
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caacacgtnt cccacaaagg gagcagacac tgggcttgtg aagctgcccc ataccttccc 120
cacagaactg gggtccggcc tccctgacat gcagatttcc acccagaaga cagagaagga 180
gccagtggtc atggaatggg ctggggtcaa agactgggtg cctgggagct gaggcagcca 240
ccgtttcagc ctggccagcc ctctggaccc cgaggttgga ccctactgtg acacacctac 300
catgcggaca ctcttcaacc tcctctggct tgccctggcc tgcagccctg ttcacactac 360
cctgtcaaag tcagatgcca aaaaagccgc ctcaaagacg ctgctggaga agagtcagtt 420
ttcagataag ccggtgcaag accggggttt ggtggtgacg gacctcaaag ctgagagtgt 480
ggttcttgag catcgcagct actgctcggc aaaggcccgg gacagacact ttgctgggga 540
tgtactgggc tatgtcactc catggaacag ccatggctac gatgtcacca aggtctttgg 600
gagcaagttc acacagatct cacccgtctg gctgcagctg aagagacgtg gccgtgagat 660
gtttgaggtc acgggcctcc acgacgtgga ccaagggtgg atgcgagctg tcaggaagca 720
tgccaagggc ctgcacatag tgcctcggct cctgtttgag gactggactt acgatgattt 780
ccggaacgtc ttagacagtg aggatgagat agaggagctg agcaagaccg tggtccaggt 840
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gaagcgcgtg accgaccagc tgggcatgtt cacgcacaag gagtttgagc agctggcccc 960
cgtgctggat ggtttcagcc tcatgaccta cgactactct acagcgcatc agcctggccc 1020
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gcgaagcaaa atcctcctgg ggctcaactt ctatggtatg gactacgcga cctccaagga 1140
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gatggtgtgg gacagccagg yctcagagca cttcttcgag tacaagaaga gccgcagtgg 1260
gaggcacgtc gtcttctacc caaccctgaa gtccctgcag gtgcggctgg agctggcccg 1320
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cctgctctag gtgggcattg cggcctccgc ggtggacgtg ttctttttcta agccatggag 1440
tgagtgagca ggtgtgaaat acaggccttc actccgttaa aaaaaaaaaa aaaaaaaaaa 1500
aaaaaaaaaa aaaaa 1515

<210> 121
<211> 1025
<212> DNA
<213> Homo sapiens

<400> 121
ggagaattgt tactggtgaa ttggttttca ggttttgagc atacatatac aatgtgtttc 60
aaatgctgct tgtaaaatta aaccatcatc tagaatagag ttaatttatt ataatcaagc 120
tacaaatagg ttttcttaaa ccagagatgc actgcccttg tctaaagttc ttattgcact 180
ggtttatatg tgtatgtgtg ttttattgtg tgtttttta atttgtaagt attctaagag 240
tttcctaata ctaaggttaa aattttcatg ttgacctgag ccttttgcaa atttgctttg 300
gctctattga tttgtccatt atgtgttagg caaatataac ttaagtggag ggggaagttt 360

atgaatataa tatagctctg tgttttaaac ctcagaaaca gatttgagtg tttcagtatt 420
atagaaacag tgatgactat tcatgctctg ctagtctatg cctgcaactc caaatgtttg 480
tggttcagta tttcccacct acatttctgt ttggtgacat tgctcatttt aacaaatatg 540
accgagtcta gtttttcttt aaaaggatag tttatgagta atctttaaaa ccatttccat 600
accatctgta tataaccatt tcggtagaga acacactaca ctgaaccctg ctttagagct 660
gtgtgttgag ctaaaaatat aatttttaa aaattgacta gcaaaatcta tggccacact 720
gagaagcctt tgaaaatggc aaatactttt catcaccaat tgcccaattc atctttcttc 780
tgcttcctca gccttgtagc aaaggctaca cagcagccca cagtccacag tctttttggg 840
aaaattggcc tgccaccttc tttaagctca gtttatttt gacttacttt ctttgctgta 900
gttatgaacc ttggggcatt aaaatcccat ggcaaggagc ataagagatg ttctcgtagc 960
tctgcgttgt gtgaaatgtc catcttagtt ttgttaaaaa aaaaaaaaaa aaaaaaaaac 1020
tcgag 1025

<210> 122
<211> 2207
<212> DNA
<213> Homo sapiens

<400> 122
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ggaaaagggt ggactcctat gtgacctgtt cttagagcaa gacaatcacc atctgaattc 120
cagaagccct gttcatggtt ggggatattt tctcgactgc atggaatcag aaagaagcaa 180
aaggatggga aatgcctgca ttcccctgaa aagaattgct tatttcctat gtctcttatc 240
tgcgcttttg ctgactgagg ggaagaaacc agcgaaccaa aatgccctgc cgtgtgtact 300
tgtaccaaag ataatgcttt atgtgagaat gccagatcca ttccacgcac cgttcctcct 360
gatgttatct cattatcctt tgtgagatct ggttttactg aaatctcaga agggagtttt 420
ttattcacgc catcgctgca gctcttgtta ttcacatcga actcctttga tgtgatcagt 480
gatgatgctt ttattggtct tccacatcta gagtatttat tcatagaaaa caacaacatc 540
aagtcaattt caagacatac tttccgggga ctaaagtcat taattcactt gagccttgca 600
aacaacaatc tccagacact cccaaaagat attttcaaag gcctggattc tttaacaaat 660
gtggacctga ggggtaattc atttaattgt gactgtaaac tgaaatggct agtggaatgg 720
cttggccaca ccaatgcaac tgttgaagac atctactgcg aaggcccccc agaatacaag 780
aagcgcaaaa tcaatagtct ctcctcgaag gatttcgatt gcatcattac agaatttgca 840
aagtctcaag acctgcctta tcaatcattg tccatagaca ctttttctta tttgaatgat 900
gagtatgtag tcatcgctca gccttttact ggaaaatgca ttttccttga atgggaccat 960
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cctatagtca ttgaaactca gctctatgtt attgtggccc agctgtttgg tggctctcac 1080
atctataagc gagacagttt tgcaaataaa ttcataaaaa tccaggatat tgaaattctc 1140
aaaatccgaa aacccaatga cattgaaaca ttcaagattg aaaacaactg gtactttgtt 1200
gttgctgaca gttcaaaagc tggttttact accatttaca aatggaacgg aaacggattc 1260
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cctgtaattt atcagtggaa caaagcaaca caattattca ctaaccaaac tgacattcct 1440
aacatggagg atgtgtacgc agtgaagcac ttctcagtga aaggggacgt gtacatttgc 1500
ttgacaagat tcattggtga ttccaaagtc atgaaatggg gaggctcctc gttccaggat 1560
attcagagga tgccatcgcg aggatccatg gtgttccagc ctcttcaaat aaataattac 1620
caatatgcaa ttcttggaag tgattactcc tttactcaag tgtataactg ggatgcagag 1680
aaagccaaat ttgtgaaatt tcaggaatta aatgttcagg caccaagatc attcacacat 1740
gtgtccatta ataagcgtaa ttttcttttt gcttccagtt ttaagggaaa tacacagatt 1800
tacaaacatg tcatagttga cttaagcgca tgagacacca aattctgtgg ctgccatcag 1860
aaattttcta cagtacatga cccggatgaa ctcaatgcat gatgactctt cttatcacac 1920
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gtgtaactgt tctttgcagt gaagatgtgt aaataagcgt ttaatggtat ctgttactcc 2100
aaaaagaaat attaatatgt acttttccat ttatttattc atgtgtacag aaacaactgc 2160
caaataaaat gtttacattt tctttcataa aaaaaaaaaa aaaaaaa 2207

<210> 123
<211> 1770
<212> DNA
<213> Homo sapiens

<400> 123
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tgggggcccc ctgggctggg ggctgctggg ggcatgggcc caggcttcca gtactagcct 120
ctctgatctg cagagctcca ggacacctgg ggtctggaag gcagaggctg aggacaccag 180
caaggacccc gttggacgta actggtgccc ctacccaatg tccaagctgg tcaccttact 240
agctctttgc aaaacagaga aattcctcat ccactcgcag cagccgtgtc cgcaggagct 300
ccagactgcc agaaagtcaa agtcatgtac cgcatggccc acaagccagt gtaccaggtc 360
aagcagaagg tgctgacctc tttggcctgg aggtgctgcc ctggctacac gggccccaac 420
tgcgagcacc acgattccat ggcaatccct gagcctgcag atcctggtga cagccaccag 480
gaacctcagg atggaccagt cagcttcaaa cctggccacc ttgctgcagt gatcaatgag 540
gttgaggtgc aacaggaaca gcaggaacat ctgctgggag atctccagaa tgatgtgcac 600
cgggtggcag acagcctgcc aggcctgtgg aaagccctgc ctggtaacct cacagctgca 660
gtgatggaag caaatcaaac agggcacgaa gttccctgat agatccttgg agcaggtgct 720
gctaccccac gtggacacct tcctacaagt gcatttcagc cccatctgga ggagctttaa 780
ccaaagcctg cacagcctta cccaggccat aagaaacctg tctcttgacg tggaggccaa 840
ccgccaggcc atctccagag tccaggacag tgccgtggcc agggctgact tccaggagct 900
tggtgccaaa tttgaggcca aggtccagga gaacactcag agagtgggtc agctgcgaca 960
ggacgtggag gaacgcctgc acgcccagca ctttaccctg caccgctcga tctcagagct 1020
ccaagccgat gtggacacca aattgaagag gctgcacaag gctcaggagg ccccagggac 1080
caatggcagt ctggtgttgg caacgcctgg ggctggggca aggcctgagc cggacagcct 1140
gcaggccagg ctgggccagc tgcagaggaa cctctcagag ctgcacatga ccacggcccg 1200
cagggaggag gagttgcagt acaccctgga ggacatgagg gccaccctga cccggcacgt 1260
ggatgagatc aaggaactgt actccgaatc ggacgagact ttcgatcaga ttagcaaggt 1320
ggagcggcag gtggaggagc tgcaggtgaa ccacacggcg ctccgtgagc tgcgcgtgat 1380
cctgatggag aagtctctga tcatggagga gaacaaggag gaggtggagc ggcagctcct 1440
ggagctcaac ctcacgctgc agcacctgca gggtggccat gccgacctca tcaagtacgt 1500
gaaggactgc aattgccaga agctctattt agacctggac gtcatccggg agggccagag 1560
ggacgccacg cgtgccctgg aggagaccca ggtgagcctg gacgagcggc ggcagctgga 1620
cggctcctcc ctgcaggccc tgcagaacgc cgtggacgcc gtgtcgctgg ccgtggacgc 1680
gcacaaagcg gagggcgagc gggcgcgggc ggccacgtcg cggctccgga gccaagtgca 1740
ggcgctggat gacgaggtgg gcgcgctgaa 1770

<210> 124
<211> 1034
<212> DNA
<213> Homo sapiens

<400> 124
ggcacgagga aagtacgagt cggctcagcc tggagggacc caaccagagc ctggcctggg 60
agccaggatg gccatccaca aagccttggt gatgtgcctg ggactgcctc tcttcctgtt 120
cccaggggcc tgggcccagg gccatgtccc acccggctgc agccaaggcc tcaacccccc 180
gtactacaac ctgtgtgacc gctctggggc gtggggcatc gtcctggagg ccgtggctgg 240
ggcgggcatt gtcaccacgt ttgtgctcac catcatcctg gtggccagcc tccccttttgt 300
gcaggacacc aagaaacgga gcctgctggg gacccagcta agaggccggt gtcaccatac 360
agcgggtaca atgggcagct gctgaccagt gtgtaccagc ccactgagat ggccctgatg 420
cacaaagttc cgtccgaagg agcttacgac atcatcctcc cacgggccac cgccaacagc 480
caggtgatgg gcagtgccaa ctcgaccctg cgggctgaag acatgtactc ggcccagagc 540
caccaggcgg ccacaccgcc gaaagacggc aagaactctc aggtctttag aaacccctac 600
gtgtgggact gagtcagcgg tggcgaggag aggcggtcgg atttggggag ggccctgagg 660

acctggcccc gggcaaggga ctctccaggc tcctcctccc cctggcaggc ccagcaacat 720
gtgccccaga tgtggaaggg cctccctctc tgccagtgtt tgggtgggtg tcatgggtgt 780
ccccacccac tcctcagtgt ttgtggagtc gaggagccaa ccccagcctc ctgccaggat 840
cacctcggcg gtcacactcc agccaaatag tgttctcggg gtggtggctg ggcagcgcct 900
atgtttctct ggagattcct gcaacctcaa gagacttccc aggcgctcag gcctggatct 960
tgctcctctg tgaggaacaa gggtgcctaa taaatacatt tctgctttat taaaaaaaaa 1020
aaaaaaaaaa aaaa 1034

<210> 125
<211> 353
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (353)
<223> Xaa equals stop translation

<400> 125
Met Leu Cys Arg Leu Cys Trp Leu Val Ser Tyr Ser Leu Ala Val Leu
1 5 10 15

Leu Leu Gly Cys Leu Leu Phe Leu Arg Lys Ala Ala Lys Pro Ala Glu
20 25 30

Thr Pro Arg Pro Thr Ser Leu Ser Gly Ala Pro Pro Thr Pro Arg His
35 40 45

Ser Arg Cys Pro Pro Asn His Thr Val Ser Ser Ala Ser Leu Ser Leu
50 55 60

Pro Ser Arg His Arg Leu Phe Leu Thr Tyr Arg His Cys Arg Asn Phe
65 70 75 80

Ser Ile Leu Leu Glu Pro Ser Gly Cys Ser Lys Asp Thr Phe Leu Leu
85 90 95

Leu Ala Ile Lys Ser Gln Pro Gly His Val Glu Arg Arg Ala Ala Ile
100 105 110

Arg Ser Thr Trp Gly Arg Trp Gly Asp Gly Leu Gly Pro Ala Leu Lys
115 120 125

Leu Val Phe Leu Leu Gly Val Ala Gly Ser Ala Pro Pro Ala Gln Leu
130 135 140

Leu Ala Tyr Glu Ser Arg Glu Phe Asp Asp Ile Leu Gln Trp Asp Phe
145 150 155 160

Thr Glu Asp Phe Phe Asn Leu Thr Leu Lys Glu Leu His Leu Gln Arg
165 170 175

Trp Val Val Ala Ala Cys Pro Gln Ala His Phe Met Leu Lys Gly Asp
180 185 190

Asp Asp Val Phe Val His Val Pro Asn Val Leu Glu Phe Leu Asp Gly

195 200 205

Trp Asp Pro Ala Gln Asp Leu Leu Val Gly Asp Val Ile Arg Gln Ala
210 215 220

Leu Pro Asn Arg Asn Thr Lys Val Lys Tyr Phe Ile Pro Pro Ser Met
225 230 235 240

Tyr Arg Ala Thr His Tyr Pro Pro Tyr Ala Gly Gly Gly Gly Tyr Val
245 250 255

Met Ser Arg Ala Thr Val Arg Arg Leu Gln Ala Ile Met Glu Asp Ala
260 265 270

Glu Leu Phe Pro Ile Asp Asp Val Phe Val Gly Met Cys Leu Arg Arg
275 280 285

Leu Gly Leu Ser Pro Met His His Ala Gly Phe Lys Thr Phe Gly Ile
290 295 300

Arg Arg Pro Leu Asp Pro Leu Asp Pro Cys Leu Tyr Arg Gly Leu Leu
305 310 315 320

Leu Val His Arg Leu Ser Pro Leu Glu Met Trp Thr Met Trp Ala Leu
325 330 335

Val Thr Asp Glu Gly Leu Lys Cys Ala Ala Gly Pro Ile Pro Gln Arg
340 345 350

Xaa

<210> 126
<211> 158
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (156)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (158)
<223> Xaa equals stop translation

<400> 126
Met Ser Trp Val Gly Leu Gly Arg Arg Gly His Leu Leu Leu Leu Ile
1 5 10 15

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Asn Pro Arg Ala Leu Ala Gly Ile Arg Leu Pro Ser Pro Thr Gly Ala
            20                  25                  30

Pro Ala Pro Gly Pro Cys Pro Pro Leu Cys Thr Pro His Cys Ser Arg
        35                  40                  45

Glu His Pro Ala Gly Gly Thr Gly His Pro Ala Gly Val Trp Trp Arg
    50                  55                  60

Arg Gly Cys Tyr Gly Gly Ser Cys Pro Met Gly Pro Val Arg Gly Ile
65                  70                  75                  80

Leu Gly Gly Leu Pro Cys Arg Glu Glu Ala Leu Arg Arg His His Ser
                85                  90                  95

Lys Pro Cys Trp Arg Pro Gly Gly Gln Ala Arg Xaa Leu Gly Ser Trp
            100                 105                 110

Pro Leu Thr Ala Gly Arg Glu Pro Pro Arg Thr Ala Ser Thr Ala Pro
        115                 120                 125

His Thr Ser Glu Pro Thr Ser Ser Phe Pro Arg Phe Pro Arg Ser Gln
    130                 135                 140

Ala Trp Glu Asp Leu Pro Asp Ala Ala His His Xaa Ser Xaa
145                 150                 155
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<210> 127
<211> 554
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (199)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (201)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (202)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (420)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (434)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (440)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (452)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (554)
<223> Xaa equals stop translation

<400> 127

```
Met Lys Ile Ala Thr Val Ser Val Leu Leu Pro Leu Ala Leu Cys Leu
  1               5                  10                  15

Ile Gln Asp Ala Ala Ser Lys Asn Glu Asp Gln Glu Met Cys His Glu
             20                  25                  30

Phe Gln Ala Phe Met Lys Xaa Gly Lys Leu Phe Cys Pro Gln Asp Lys
         35                  40                  45

Lys Phe Phe Gln Ser Leu Asp Gly Ile Met Phe Ile Asn Lys Cys Ala
     50                  55                  60

Thr Cys Lys Met Ile Leu Glu Lys Glu Ala Lys Ser Gln Lys Arg Ala
 65                  70                  75                  80

Arg His Leu Ala Arg Ala Pro Lys Ala Thr Ala Pro Thr Glu Leu Asn
                 85                  90                  95

Cys Asp Asp Phe Lys Lys Gly Glu Arg Asp Gly Asp Phe Ile Cys Pro
            100                 105                 110

Asp Tyr Tyr Glu Ala Val Cys Gly Thr Asp Gly Lys Thr Tyr Asp Asn
        115                 120                 125

Arg Cys Ala Leu Cys Ala Glu Asn Ala Lys Thr Gly Ser Gln Ile Gly
    130                 135                 140

Val Lys Ser Glu Gly Glu Cys Lys Ser Ser Asn Pro Glu Gln Asp Val
145                 150                 155                 160
```

Cys Ser Ala Phe Arg Pro Phe Val Arg Asp Gly Arg Leu Gly Cys Thr
165 170 175

Arg Glu Asn Asp Pro Val Leu Gly Pro Asp Gly Lys Thr His Gly Asn
180 185 190

Lys Cys Ala Met Cys Ala Xaa Leu Xaa Xaa Lys Glu Ala Glu Asn Ala
195 200 205

Lys Arg Glu Gly Glu Thr Arg Ile Arg Arg Asn Ala Glu Lys Asp Phe
210 215 220

Cys Lys Glu Xaa Glu Lys Gln Val Arg Asn Gly Arg Leu Phe Cys Thr
225 230 235 240

Arg Glu Ser Asp Pro Val Arg Gly Pro Asp Gly Arg Met His Gly Asn
245 250 255

Lys Cys Ala Leu Cys Ala Glu Ile Phe Lys Gln Arg Phe Ser Glu Glu
260 265 270

Asn Ser Lys Thr Asp Gln Asn Leu Gly Lys Ala Glu Glu Lys Thr Lys
275 280 285

Val Lys Arg Glu Ile Val Lys Leu Cys Ser Gln Tyr Gln Asn Gln Ala
290 295 300

Lys Asn Gly Ile Leu Phe Cys Thr Arg Glu Asn Asp Pro Ile Arg Gly
305 310 315 320

Pro Asp Gly Lys Met His Gly Asn Leu Cys Ser Met Cys Gln Ala Tyr
325 330 335

Phe Gln Ala Glu Asn Glu Glu Lys Lys Lys Ala Glu Ala Arg Ala Arg
340 345 350

Asn Lys Arg Glu Ser Gly Lys Ala Thr Ser Tyr Ala Glu Leu Cys Ser
355 360 365

Glu Tyr Arg Lys Leu Val Arg Asn Gly Lys Leu Ala Cys Thr Arg Glu
370 375 380

Asn Asn Pro Ile Gln Gly Pro Asp Gly Lys Val His Gly Asn Thr Cys
385 390 395 400

Ser Met Cys Glu Val Phe Phe Gln Ala Glu Glu Glu Glu Lys Lys Lys
405 410 415

Lys Glu Gly Xaa Ser Arg Asn Lys Arg Gln Ser Lys Ser Thr Ala Ser
420 425 430

Phe Xaa Glu Leu Cys Ser Glu Xaa Arg Lys Ser Arg Lys Asn Gly Arg
435 440 445

Leu Phe Cys Xaa Arg Glu Asn Asp Pro Ile Gln Gly Pro Asp Gly Lys
450 455 460

75

Met His Gly Asn Thr Cys Ser Met Cys Glu Ala Phe Phe Gln Gln Glu
465 470 475 480

Glu Arg Ala Arg Ala Lys Ala Lys Arg Glu Ala Ala Lys Glu Ile Cys
485 490 495

Ser Glu Phe Arg Asp Gln Val Arg Asn Gly Thr Leu Ile Cys Thr Arg
500 505 510

Glu His Asn Pro Val Arg Gly Pro Asp Gly Lys Met His Gly Asn Lys
515 520 525

Cys Ala Met Cys Ala Ser Val Phe Lys Leu Glu Lys Lys Lys Lys Lys
530 535 540

Lys Lys Lys Lys Lys Gly Arg Pro Leu Xaa
545 550

<210> 128
<211> 308
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (308)
<223> Xaa equals stop translation

<400> 128
Met Asn Thr Val Leu Leu Ser Leu Leu Phe Ser Leu Pro Arg Ile Val
1 5 10 15

Tyr Ala Met Ala Ala Asp Gly Leu Phe Phe Gln Val Phe Ala His Val
20 25 30

His Pro Arg Thr Gln Val Pro Val Ala Gly Thr Leu Ala Phe Gly Leu
35 40 45

Leu Thr Ala Phe Leu Ala Leu Leu Leu Asp Leu Glu Ser Leu Val Gln
50 55 60

Phe Leu Ser Leu Gly Thr Leu Leu Ala Tyr Thr Phe Val Ala Thr Ser
65 70 75 80

Ile Ile Val Leu Arg Phe Gln Lys Ser Ser Pro Pro Ser Ser Pro Gly
85 90 95

Pro Ala Ser Pro Gly Pro Leu Thr Lys Gln Gln Ser Ser Phe Ser Asp
100 105 110

His Leu Gln Leu Val Gly Thr Val His Ala Ser Val Pro Glu Pro Gly
115 120 125

Glu Leu Lys Pro Ala Leu Arg Pro Tyr Leu Gly Phe Leu Asp Gly Tyr
130 135 140

```
Ser Pro Gly Ala Val Val Thr Trp Ala Leu Gly Val Met Leu Ala Ser
145                 150                 155                 160

Ala Ile Thr Ile Gly Cys Val Leu Val Phe Gly Asn Ser Thr Leu His
                165                 170                 175

Leu Pro His Trp Gly Tyr Ile Leu Leu Leu Leu Leu Thr Ser Val Met
            180                 185                 190

Phe Leu Leu Ser Leu Leu Val Leu Gly Ala His Gln Gln Gln Tyr Arg
        195                 200                 205

Glu Asp Leu Phe Gln Ile Pro Met Val Pro Leu Ile Pro Ala Leu Ser
    210                 215                 220

Ile Val Leu Asn Ile Cys Leu Met Leu Lys Leu Ser Tyr Leu Thr Trp
225                 230                 235                 240

Val Arg Phe Ser Ile Trp Leu Leu Met Gly Leu Ala Val Tyr Phe Gly
                245                 250                 255

Tyr Gly Ile Arg His Ser Lys Glu Asn Gln Arg Glu Leu Pro Gly Leu
            260                 265                 270

Asn Ser Thr His Tyr Val Val Phe Pro Arg Gly Ser Leu Glu Glu Thr
        275                 280                 285

Val Gln Ala Met Gln Pro Pro Ser Gln Ala Pro Ala Gln Asp Pro Gly
    290                 295                 300

His Met Glu Xaa
305
```

<210> 129
<211> 167
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (167)
<223> Xaa equals stop translation

<400> 129

```
Met Ala Ala Ala Val Leu Ala Met Thr Leu Ala Pro Thr Val Ser Gly
  1               5                  10                  15

Thr Thr Ser Lys Cys Ser Ser Arg Arg Trp Cys Pro Val Pro Ala Ser
             20                  25                  30

Ser Ser Cys Val Ser His Leu Leu Gly Ser Gly Cys Ala Pro Cys Ala
         35                  40                  45

Pro Trp Thr Ala His Pro Arg Gln Pro Ser Gln Cys Trp Ser Ala Arg
     50                  55                  60
```

```
Ala Pro Arg Arg Leu Gly Ser Arg Pro Arg Arg Tyr Leu Leu Thr Gly
 65                  70                  75                  80

Gln Ala Asn Gly Ser Leu Ala Met Trp Asp Leu Thr Thr Ala Met Asp
                85                  90                  95

Gly Leu Gly Gln Ala Pro Ala Gly Gly Leu Thr Glu Gln Glu Leu Met
            100                 105                 110

Glu Gln Leu Glu His Cys Glu Leu Ala Pro Pro Ala Pro Phe Ser Ser
        115                 120                 125

Leu Met Gly Leu Ser Pro Gln Pro Leu Thr Pro His Leu Pro His Gln
    130                 135                 140

Pro Pro Leu Ser Leu Gln Gln His Leu Leu Val Trp Pro Pro Trp Glu
145                 150                 155                 160

Pro Lys Pro Pro Ala Gly Xaa
                165
```

<210> 130
<211> 306
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (306)
<223> Xaa equals stop translation

<400> 130

```
Met Ala Ala Gly Leu Ala Arg Leu Leu Leu Leu Leu Gly Leu Ser Ala
  1               5                  10                  15

Gly Gly Pro Ala Pro Ala Gly Ala Ala Lys Met Lys Val Val Glu Glu
             20                  25                  30

Pro Asn Ala Phe Gly Val Asn Asn Pro Phe Leu Pro Gln Ala Ser Arg
         35                  40                  45

Leu Gln Ala Lys Arg Asp Pro Ser Pro Val Ser Gly Pro Val His Leu
     50                  55                  60

Phe Arg Leu Ser Gly Lys Cys Phe Ser Leu Val Glu Ser Thr Tyr Lys
 65                  70                  75                  80

Tyr Glu Phe Cys Pro Phe His Asn Val Thr Gln His Glu Gln Thr Phe
                85                  90                  95

Arg Trp Asn Ala Tyr Ser Gly Ile Leu Gly Ile Trp His Glu Trp Glu
            100                 105                 110

Ile Ala Asn Asn Thr Phe Thr Gly Met Trp Met Arg Asp Gly Asp Ala
        115                 120                 125
```

```
Cys Arg Ser Arg Ser Arg Gln Ser Lys Val Glu Leu Ala Cys Gly Lys
    130                 135                 140

Ser Asn Arg Leu Ala His Val Ser Glu Pro Ser Thr Cys Val Tyr Ala
145                 150                 155                 160

Leu Thr Phe Glu Thr Pro Leu Val Cys His Pro His Ala Leu Leu Val
                165                 170                 175

Tyr Pro Thr Leu Pro Glu Ala Leu Gln Arg Gln Trp Asp Gln Val Glu
            180                 185                 190

Gln Asp Leu Ala Asp Glu Leu Ile Thr Pro Gln Gly His Glu Lys Leu
        195                 200                 205

Leu Arg Thr Leu Phe Glu Asp Ala Gly Tyr Leu Lys Thr Pro Glu Glu
    210                 215                 220

Asn Glu Pro Thr Gln Leu Glu Gly Gly Pro Asp Ser Leu Gly Phe Glu
225                 230                 235                 240

Thr Leu Glu Asn Cys Arg Lys Ala His Lys Glu Leu Ser Lys Glu Ile
                245                 250                 255

Lys Arg Leu Lys Gly Leu Leu Thr Gln His Gly Ile Pro Tyr Thr Arg
            260                 265                 270

Pro Thr Glu Thr Ser Asn Leu Glu His Leu Gly His Glu Thr Pro Arg
        275                 280                 285

Ala Lys Ser Pro Glu Gln Leu Arg Gly Asp Pro Gly Leu Arg Gly Ser
    290                 295                 300

Leu Xaa
305
```

<210> 131
<211> 220
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (204)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (209)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (220)
<223> Xaa equals stop translation

<400> 131
Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile Leu Leu Val
1 5 10 15

Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu Gly Ala Val
20 25 30

Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr Leu Gly Lys
35 40 45

Asn Trp Ser Phe Val Trp Ser Xaa Leu Xaa Val Thr Ala Met Ala Phe
50 55 60

Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu Leu Glu Ala
65 70 75 80

Arg Val Val His Gly Leu Gln Pro Pro Cys Phe Gln Glu Pro Cys Ser
85 90 95

Asn Pro Asp Ser Leu Ile Phe Gly Ala Leu Thr Ile Met Thr Gly Val
100 105 110

Ile Gly Val Ile Leu Gly Ala Glu Ala Ala Arg Arg Tyr Lys Lys Val
115 120 125

Ile Pro Gly Ala Glu Pro Leu Ile Cys Ala Ser Ser Leu Leu Ala Thr
130 135 140

Ala Pro Cys Leu Tyr Leu Ala Leu Val Leu Ala Pro Thr Thr Leu Leu
145 150 155 160

Ala Ser Tyr Val Phe Leu Gly Leu Gly Glu Leu Leu Leu Ser Cys Asn
165 170 175

Trp Ala Val Val Ala Asp Ile Leu Leu Ser Val Val Val Pro Arg Cys
180 185 190

Arg Gly Thr Ala Glu Ala Leu Gln Ile Thr Val Xaa His Ile Leu Gly
195 200 205

Xaa Leu Ala Ala Leu Ser His Arg Thr Tyr Leu Xaa
210 215 220

<210> 132
<211> 99
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (99)
<223> Xaa equals stop translation

<400> 132
Met Met Asn Gln His Leu Leu Glu Ser Phe Gly Ser Pro Ser Ser Leu
1 5 10 15

Phe Ile Val Phe Ile Leu Leu Ile Trp Met Leu Gln Arg Cys Lys Asp
20 25 30

Phe Phe Leu Cys Cys Tyr Arg Val Val Leu Thr Pro Ser Phe Trp Gln
35 40 45

Lys His Gln His Pro Asp Pro Lys Ile Lys His His Leu Lys Leu Tyr
50 55 60

Ser Leu Lys Tyr Ser Ser Ser Gly Gln Asn Asn Phe Arg Lys Asp Lys
65 70 75 80

His Trp Leu Ser Gly His Thr Glu Glu Ala Asn Leu Ile Lys Glu Glu
85 90 95

Trp Lys Xaa

<210> 133
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (61)
<223> Xaa equals stop translation

<400> 133
Met Thr Ser Ser Leu Phe Ile Phe Leu Phe Leu Trp Phe Cys Pro Pro
1 5 10 15

Pro Arg Ile Ser Phe Val Leu Cys Trp Pro Gln Pro His Ser Gln Val
20 25 30

His Ile Gln His Glu Lys Ala Asp His Leu Phe Gln Ser Leu Lys Gln
35 40 45

Lys Ala Pro Gly Leu Leu Gln Trp Ala Arg Ile Val Xaa
50 55 60

<210> 134
<211> 248
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (141)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (248)
<223> Xaa equals stop translation

<400> 134

```
Met Ala Val Pro Ala Leu Thr Pro Ala Ala Val Arg Ala Xaa Gly Leu
  1               5                  10                  15

Leu Gly Val Ser Trp Thr Trp Ala Leu Phe Thr Pro Leu Val Ala Leu
             20                  25                  30

Gly Arg Glu Gly Gly Ser Gln Asp Ser Ala Thr Thr Pro Ser Arg Pro
         35                  40                  45

Pro Gly Arg Pro Arg Ile Val Asp Ile Ala Thr Ile Val His Cys Tyr
     50                  55                  60

Ala Glu Glu Arg Gln Ser Ala Glu Asp Tyr Glu Lys Glu Glu Ser His
 65                  70                  75                  80

Arg Gln Arg Arg Leu Lys Glu Arg Glu Arg Ile Gly Glu Leu Gly Ala
                 85                  90                  95

Pro Glu Val Trp Gly Pro Ser Pro Lys Phe Pro Gln Leu Asp Ser Asp
            100                 105                 110

Glu His Thr Pro Val Glu Asp Glu Glu Glu Val Thr His Gln Lys Ser
        115                 120                 125

Ser Ser Ser Asp Ser Asn Ser Glu Glu His Arg Lys Xaa Lys Thr Ser
    130                 135                 140

Arg Ser Arg Asn Lys Lys Lys Arg Lys Asn Lys Ser Ser Lys Arg Lys
145                 150                 155                 160

His Arg Lys Tyr Ser Asp Ser Asp Ser Asn Ser Glu Ser Asp Thr Asn
                165                 170                 175

Ser Asp Ser Asp Asp Asp Lys Lys Arg Val Lys Ala Lys Lys Lys Lys
            180                 185                 190

Lys Lys Lys Lys His Lys Thr Lys Lys Lys Lys Asn Lys Lys Thr Lys
        195                 200                 205
```

```
Lys Glu Ser Ser Asp Ser Ser Cys Lys Asp Ser Glu Glu Asp Leu Ser
    210                 215                 220

Glu Ala Thr Trp Asp Gly Ala Ala Lys Cys Gly Arg Tyr Tyr Gly Phe
225                 230                 235                 240

Asn Arg Ala Arg Ser Thr Tyr Xaa
                245
```

<210> 135
<211> 41
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals stop translation

<400> 135

```
Met Val Cys Phe Tyr Ala Leu Leu Leu Cys Phe Leu Ser Ser Val Glu
  1               5                  10                  15

Ile Gly Pro Leu Ser Trp Leu Leu Cys Leu Ser His Ile Lys Cys His
             20                  25                  30

Phe Thr Ala Leu Pro Phe Glu Ala Xaa
         35                  40
```

<210> 136
<211> 75
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (75)
<223> Xaa equals stop translation

<400> 136

```
Met Leu His Leu Phe Cys Ser Gln Pro Leu Gly Leu Leu Phe Leu Leu
  1               5                  10                  15

Ile Phe Leu Gly Leu Asp Ser Leu Pro Arg Cys Leu Thr Ala Thr Arg
             20                  25                  30

Leu Gln Ser Pro Ile Ile Ile Phe Ser Thr Leu Ser Cys Ile Cys Ser
         35                  40                  45

Thr Ser Trp Leu Glu Leu Cys Ser Val Tyr Phe Leu Thr Leu Asn Tyr
     50                  55                  60

Leu His Val Val Pro Pro Cys Phe Leu Ile Xaa
 65                  70                  75
```

<210> 137
<211> 75
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (75)
<223> Xaa equals stop translation

<400> 137
Met Gly Val Leu Thr Arg Glu Leu Phe Gly Val Val Gly Met Leu Tyr
1 5 10 15

Ile Leu Ile Val Gly Met Val Thr Trp Leu Asp Ala Phe Val Lys Thr
20 25 30

His Leu Met Val Met Gln Asn Glu Tyr Ile Leu Phe Tyr Val Asn Tyr
35 40 45

Thr Ser Lys Leu Asn Phe Phe Lys Lys Phe Leu Leu Lys Ser Lys Asp
50 55 60

Ile Cys Gly Ala Ser Cys Lys Phe Tyr Cys Xaa
65 70 75

<210> 138
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals stop translation

<400> 138
Met Lys Val Leu Leu Ser Leu Ser Leu Val Gly Leu Phe Ile Gly Phe
1 5 10 15

Ser Asp Ala Val Leu Asn Glu Thr Cys Arg Phe Trp Ile Asn Thr Ser
20 25 30

Ser Lys Gly Asn Leu Gln Ile Leu Lys Asn Gln Ile Gln Ile Ile Asp
35 40 45

Arg Leu Arg Lys Met Pro Ala Ser Ala Xaa
50 55

<210> 139
<211> 173
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 139
Met Leu Gly Ser Pro Cys Leu Leu Trp Leu Leu Ala Val Thr Phe Leu
1 5 10 15

Val Pro Arg Ala Gln Pro Leu Ala Pro Gln Asp Phe Glu Glu Glu Glu
20 25 30

Ala Asp Glu Thr Glu Thr Ala Trp Pro Pro Leu Pro Ala Val Pro Cys
35 40 45

Asp Tyr Asp His Cys Arg His Leu Gln Val Pro Cys Lys Glu Leu Gln
50 55 60

Arg Val Gly Pro Ala Ala Cys Leu Cys Pro Gly Xaa Ser Ser Pro Ala
65 70 75 80

Gln Pro Pro Asp Pro Pro Arg Met Gly Glu Val Arg Ile Ala Ala Glu
85 90 95

Glu Gly Arg Ala Val Val His Trp Cys Ala Pro Phe Ser Pro Val Leu
100 105 110

His Tyr Trp Leu Leu Leu Trp Asp Gly Ser Glu Xaa Arg Arg Arg Gly
115 120 125

Pro Pro Leu Asn Ala Thr Val Arg Arg Ala Glu Leu Lys Gly Leu Lys
130 135 140

Pro Gly Gly Ile Tyr Val Val Cys Val Val Ala Ala Asn Glu Ala Gly
145 150 155 160

Ala Ser Arg Val Pro Gln Ala Gly Gly Glu Gly Leu Glu
165 170

<210> 140
<211> 46
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (46)
<223> Xaa equals stop translation

<400> 140
Met Thr Ile His Ala Leu Leu Val Tyr Ala Cys Asn Ser Lys Cys Leu

85

1 5 10 15

Trp Phe Ser Ile Ser His Leu His Phe Cys Leu Val Thr Leu Leu Ile
20 25 30

Leu Thr Asn Met Thr Glu Ser Ser Phe Ser Leu Lys Gly Xaa
35 40 45

<210> 141
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals stop translation

<400> 141
Met Val Tyr Arg Ala Phe Leu Ile Ile Ile Leu Arg Phe Ile Leu Ile
1 5 10 15

Phe Leu Phe Lys Leu Asn Tyr Ser Lys Leu Cys Pro Glu Ile Pro Phe
20 25 30

Gly Leu Lys Phe Phe Ser Phe Val Cys Ile Lys Val Gln Ile Lys Lys
35 40 45

Thr Ser Arg Lys Arg Arg Pro Tyr Leu Xaa
50 55

<210> 142
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (67)
<223> Xaa equals stop translation

<400> 142
Met Phe Val Glu Arg Trp Leu Pro Cys Phe Leu Val Val Ala Val Val
1 5 10 15

Val Trp Val Phe Ala Cys Gly Pro Val Glu Asp Lys Glu Asp Ser Phe
20 25 30

Gly Trp Ser Ser Tyr Phe Leu Ala Ser Gly Leu Pro Pro Leu Leu Phe
35 40 45

Glu Ala Ser Gln Thr Arg Thr Val Arg Ala Gly Arg Leu Gly Val Phe
50 55 60

Val Cys Xaa

65

<210> 143
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> Xaa equals stop translation

<400> 143
Met Ile Phe Lys Leu Leu Ile Phe Arg Ile Phe Phe His Glu Leu Ala
1 5 10 15

Leu Ala Leu Cys Ile Ser Asn Leu Val Ser Leu Pro Trp Leu Ser Tyr
20 25 30

Phe Trp Cys Pro Glu Met Gln Asn Leu Phe Leu Leu Asp Thr His Ile
35 40 45

Trp Val Leu Met Xaa
50

<210> 144
<211> 66
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (66)
<223> Xaa equals stop translation

<400> 144
Met Val Leu Ser Val Ala Leu Leu His Ala Leu Ser His Leu Met Pro
1 5 10 15

Cys Lys Thr Cys Leu Ala Ser Thr Ser Pro Ser Ala Met Ile Val Ser
20 25 30

Phe Leu Arg Pro Pro Gln Pro Ala Met Trp Asn Cys Glu Ser Ile Lys
35 40 45

Pro Phe Leu Phe Ile His Tyr Pro Val Ser Gly Ser Ile Phe Ile Ala
50 55 60

Val Xaa
65

<210> 145
<211> 57
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (57)
<223> Xaa equals stop translation

<400> 145
Met Val Ala Ile Leu Leu Arg Glu Leu Pro Leu Ala Phe Leu Leu Val
1 5 10 15

Gly Ser Ser Gly Asp Lys Phe Cys Phe Thr Ser Ser Glu Asn Val Leu
20 25 30

Leu Ser Phe Ser Phe Leu Lys Asp Ile Phe Ala Gly Tyr Lys Asn Ser
35 40 45

Gly Leu Met Val Leu Phe Ile Val Xaa
50 55

<210> 146
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (67)
<223> Xaa equals stop translation

<400> 146
Met Ser Asn Phe Ile Ser Ile Thr Cys Leu Val Phe Thr Ile Leu Gly
1 5 10 15

His Leu Val Ser Leu Gln Val Ala His Ser Ser Val Phe Glu Phe Lys
20 25 30

Thr Leu Tyr Val Leu Lys Thr Asn Arg Tyr Ser Gln Ser Leu Phe Arg
35 40 45

His Phe Cys His Leu Ser Phe Ile Arg Thr Arg Lys Ile Phe Leu Lys
50 55 60

Asn Asn Xaa
65

<210> 147
<211> 49
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (49)
<223> Xaa equals stop translation

<400> 147
Met Met Lys Tyr Phe Phe Asp Val Val Val Phe Leu Thr Phe Phe Leu
1 5 10 15

Val Phe Ser Leu Ser Ile Phe Leu Ser Asp Glu Glu Phe Pro Val Ser
20 25 30

Arg Thr Gln Asn Ile Gly Leu Cys His Phe Asn Pro Ser Phe Ser Glu
35 40 45

Xaa

<210> 148
<211> 89
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (89)
<223> Xaa equals stop translation

<400> 148
Met Leu Leu Leu Cys Leu Tyr Cys Thr Phe Phe Leu Met Pro Phe Ile
1 5 10 15

Ile Lys Tyr Thr Cys Phe His Leu Val Phe Gly Gln Ile Pro Val Thr
20 25 30

Val His Val Asn Ile Trp Gln His Lys Asn Val Thr Phe Phe Ile Leu
35 40 45

His Cys Gly Ile Pro Ala Leu Thr Arg Asp Ser Ala Ala Leu Thr Tyr
50 55 60

Ser Asn Asp Gly Thr Val Ile Glu Thr Leu Leu Phe Leu Ile Leu Tyr
65 70 75 80

Leu Asp Leu Asn Ile Ile Cys Cys Xaa
85

<210> 149
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (77)
<223> Xaa equals stop translation

<400> 149
Met Thr Leu Tyr Ser Lys Leu Leu Trp Leu Phe Lys Gly Glu Leu Leu

```
  1               5                  10                  15

Phe Pro Leu Val Leu Ala Tyr Val Leu Leu Leu Tyr Ile Val Thr Lys
            20                  25                  30

Phe Asn Tyr Leu Ile Leu Lys Leu Phe Pro Asn Lys Ile Gln Ile Lys
        35                  40                  45

Arg Gly Ser Ile Ala Ser Asn Arg Ser Leu Glu Ser Ser Ala Ser Leu
    50                  55                  60

Pro Ala Arg Lys Glu Glu Lys Leu Leu Lys Lys Phe Xaa
65                  70                  75
```

<210> 150
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals stop translation

<400> 150

```
Met Asn Leu Ser Phe Leu Ser Phe Phe Leu Phe Phe Tyr Leu Leu Trp
  1               5                  10                  15

Ser Pro Ala Glu Ser Val Tyr Lys Lys Gly Met Val Lys Lys Asn Leu
            20                  25                  30

Ser His Ser Ile Val Glu Lys Ile Lys Xaa
        35                  40
```

<210> 151
<211> 46
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (46)
<223> Xaa equals stop translation

<400> 151

```
Met Asn Ala Leu Pro Asn Leu Ala Trp Leu Pro Phe Val Pro Ala Leu
  1               5                  10                  15

Ala Ala Ala Ser Pro Ala Gly Leu Ala Ala Pro Glu Ser Arg Asp Val
            20                  25                  30

Pro Phe Pro Val Ser Pro Ala Thr Gln Leu Asn Ile Gly Xaa
        35                  40                  45
```

<210> 152
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals stop translation

<400> 152
Met Leu His Leu Leu Cys Leu Gly Leu His Leu Val Pro Pro Gly Leu
1 5 10 15

Leu Ser Val Asn Ser Leu Gln Ser Thr Gln Cys Ser Leu Phe Ser Ala
20 25 30

Ala Lys Phe Phe Ser Ile Val Gln Val Xaa
35 40

<210> 153
<211> 44
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> Xaa equals stop translation

<400> 153
Met Pro Tyr Met Phe Arg Pro Ala Phe Leu Asn Cys Gly Thr Phe Ala
1 5 10 15

Ile Phe Gly Gln Leu Asn Ser Val Val Gly Ala Val Leu Cys Ile Ala
20 25 30

Gly Cys Leu Ala Ala Ser Leu Ala Ser Thr Tyr Xaa
35 40

<210> 154
<211> 123
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (123)
<223> Xaa equals stop translation

<400> 154
Met Pro Pro Leu Ala Pro Gln Leu Cys Arg Ala Val Phe Leu Val Pro
1 5 10 15

Ile Leu Leu Leu Leu Gln Val Lys Pro Leu Asn Gly Ser Pro Gly Pro

20 25 30

Lys Asp Gly Ser Gln Thr Glu Lys Thr Pro Ser Ala Asp Gln Asn Gln
35 40 45

Glu Gln Phe Glu Glu His Phe Val Ala Ser Ser Val Gly Glu Met Trp
50 55 60

Gln Val Val Asp Met Ala Gln Gln Glu Glu Asp Gln Ser Ser Lys Thr
65 70 75 80

Ala Ala Val His Lys His Ser Phe His Leu Ser Phe Cys Phe Ser Leu
85 90 95

Ala Ser Val Met Val Phe Ser Gly Gly Pro Leu Arg Arg Thr Phe Pro
100 105 110

Asn Ile Gln Leu Cys Phe Met Leu Thr His Xaa
115 120

<210> 155
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals stop translation

<400> 155
Met Lys Gln Phe Gly Phe Gly His Pro Ile Lys Leu Leu Lys Thr Lys
1 5 10 15

Leu Cys Arg Ile Val Phe Tyr Leu Val Phe Phe Val Trp Pro Gln Ser
20 25 30

Ser Val Ile Arg Glu Ala Thr Gln Thr Xaa
35 40

<210> 156
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (56)
<223> Xaa equals stop translation

<400> 156
Met Val Leu Ala Ala Pro Leu Val Ala Phe Pro Cys Ile Leu Leu Phe
1 5 10 15

Ala Phe Ser Pro Ser Ala Val Arg Asp His Val Gly Asp Ser Arg Ser

20 25 30

Asp Val Pro Ile Phe Ala Cys Leu Ala Leu Ala Ser Leu Ala Leu Gly
35 40 45

Ser Val Leu Leu Val Ala Phe Xaa
50 55

<210> 157
<211> 45
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals stop translation

<400> 157
Met Met Lys Met Val Leu Gly Leu Phe Phe Leu Met Asn Leu Leu Ser
1 5 10 15

Gly Lys Lys Ser Val Arg His His Ser Lys Asn Tyr Val Lys Lys Met
20 25 30

Gln Thr Phe Gln Phe Pro Arg Val Tyr Lys Leu Met Xaa
35 40 45

<210> 158
<211> 86
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (86)
<223> Xaa equals stop translation

<400> 158
Met Lys Lys Val Leu Leu Leu Ile Thr Ala Ile Leu Ala Val Ala Val
1 5 10 15

Gly Phe Pro Val Ser Gln Asp Gln Glu Arg Glu Lys Arg Ser Ile Ser
20 25 30

Asp Ser Asp Glu Leu Ala Ser Gly Phe Phe Val Phe Pro Tyr Pro Tyr
35 40 45

Pro Phe Arg Pro Leu Pro Pro Ile Pro Phe Pro Arg Phe Pro Trp Phe
50 55 60

Arg Arg Asn Phe Pro Ile Pro Ile Pro Glu Ser Ala Pro Thr Thr Pro
65 70 75 80

Leu Pro Ser Glu Lys Xaa

<210> 159
<211> 45
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals stop translation

<400> 159
Met Ile Cys Leu Cys Ser Ile Lys Met Leu Leu Leu Phe Cys Gln Leu
1 5 10 15

Thr Phe Ala Leu Ile Thr Cys Ile Asn Leu Gln Ser Leu Tyr Leu Phe
20 25 30

Ser Tyr Gln Gln Ile Ile Gly Ile His Ser His Val Xaa
35 40 45

<210> 160
<211> 69
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (69)
<223> Xaa equals stop translation

<400> 160
Met Trp Leu Arg Gly Ile His Pro Phe Leu Trp Leu Ser Gly Ile His
1 5 10 15

Ser Phe Pro Trp Leu Ser Gly Gly Pro Ser Leu Gly Thr Ser Ser Glu
20 25 30

Gln Pro Thr Ser Leu Glu Asp Gly Lys Leu Ile Cys Leu Phe Thr Asp
35 40 45

Phe Ser Gly Ser Ser Phe Gly Leu Phe Met Arg Glu Ala Ala Lys Asn
50 55 60

Ile Ser Gln Met Xaa
65

<210> 161
<211> 53
<212> PRT
<213> Homo sapiens

<220>

<221> SITE
<222> (53)
<223> Xaa equals stop translation

<400> 161
Met Leu Tyr Asp Ser Asn Leu Cys Ser Val Trp His Leu Tyr Leu Ile
1 5 10 15

Leu His Leu Cys Lys Thr Phe Val Tyr Cys Gly Cys Val His Ser Ser
20 25 30

Tyr Leu Ile Ser Gly Thr Val Asn Thr Gln Tyr Phe Ile Val Gln Thr
35 40 45

Val Leu Leu Phe Xaa
50

<210> 162
<211> 57
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (57)
<223> Xaa equals stop translation

<400> 162
Met Arg Val Lys Ile Ser Tyr Leu Met Ile Ala Leu Thr Val Val Gly
1 5 10 15

Cys Ile Phe Met Val Ile Glu Gly Lys Lys Ala Ala Gln Arg His Glu
20 25 30

Thr Leu Thr Ser Leu Asn Leu Glu Lys Lys Ala Arg Leu Lys Glu Glu
35 40 45

Ala Ala Met Lys Ala Lys Thr Glu Xaa
50 55

<210> 163
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (56)
<223> Xaa equals stop translation

<400> 163
Met Arg Glu Lys Thr Gly Ala Leu Pro Arg Cys Leu Gly Leu Leu Gly
1 5 10 15

Val Gly Leu Leu Trp Arg Trp Cys Gly Arg Arg Ala Arg Ala Gly Val

95

20 25 30

Gly Lys Ala Trp Ser Ala Thr Arg Ser Pro Ser Asp Ser Cys Phe Pro
35 40 45

Gly Val Ala Arg Val Gly Ile Xaa
50 55

<210> 164
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation

<400> 164
Met His Gly His Thr Ser Ser Leu Pro Pro Ser Leu Leu Ser Ser Leu
1 5 10 15

Pro Ser Gly Leu Leu Ala Leu Phe Val Phe Pro Phe Leu Ile Leu Leu
20 25 30

Leu His Ala Glu Asp Leu Pro Tyr Tyr Tyr Phe Gly Asn Ile Glu Xaa
35 40 45

<210> 165
<211> 130
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (130)
<223> Xaa equals stop translation

<400> 165
Met Ser Ala Ser Ser Leu His Arg Leu Pro Val Leu Met Ala Leu Phe
1 5 10 15

Pro Phe Gln Ala Ala Ala Ala Gly Ser Leu Gly Leu Gln Pro Pro Pro
20 25 30

Thr Pro Met Lys Gly Lys Pro Ser Ile Met Leu Pro Pro Gln Tyr Lys
35 40 45

Arg Arg Glu Gly Leu Lys Lys Lys Lys Lys Lys Ile Gln Lys Val Ala
50 55 60

Leu Val Ser Phe Gly Arg Ala Asp Ser Ile Val Gly Asp Gly Leu Pro

65 70 75 80

Thr Asn Gln Gly Asp Lys Cys Gln Arg Glu Arg Thr Met Pro Gly Ser
85 90 95

Lys His Ile Ser Pro Gln Thr Pro Gln Val Gly Lys Gln Ala Arg Gly
100 105 110

Ser Thr Asn Pro Ser Gly Arg Pro Gly Val Gln Met Leu Tyr Ser Ser
115 120 125

Ile Xaa
130

<210> 166
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (105)
<223> Xaa equals stop translation

<400> 166
Met Leu Trp Leu Leu Phe Phe Leu Val Thr Ala Ile His Ala Glu Leu
1 5 10 15

Cys Gln Pro Gly Ala Glu Asn Ala Phe Lys Val Arg Leu Ser Ile Arg
20 25 30

Thr Ala Leu Gly Asp Lys Ala Tyr Ala Trp Asp Thr Asn Glu Glu Tyr
35 40 45

Leu Phe Lys Ala Met Val Ala Phe Ser Met Arg Lys Val Pro Asn Arg
50 55 60

Glu Ala Thr Glu Ile Ser His Val Leu Leu Cys Asn Val Thr Gln Arg
65 70 75 80

Tyr His Ser Gly Leu Trp Leu Gln Thr Leu Gln Lys Ile Thr Pro Phe
85 90 95

Leu Leu Leu Arg Cys Asn Gln Pro Xaa
100 105

<210> 167
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (77)
<223> Xaa equals stop translation

<400> 167
Met Thr Lys Ala Arg Leu Phe Arg Leu Trp Leu Val Leu Gly Ser Val
1 5 10 15

Phe Met Ile Leu Leu Ile Ile Val Tyr Trp Asp Ser Ala Ala Pro Arg
20 25 30

Thr Ser Thr Cys Thr Arg Pro Ser Leu Gly Arg Thr Arg Gly Arg Arg
35 40 45

Cys Pro Arg Pro Gly Arg Thr Gly Gln Gly Ala His Gly Arg Leu Arg
50 55 60

Cys Arg Arg Val Ser Gly Gln Phe Leu Met Leu Ala Xaa
65 70 75

<210> 168
<211> 355
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (355)
<223> Xaa equals stop translation

<400> 168
Met Trp Arg Leu Trp Pro Gly Ser Pro Leu Val Pro Leu Ser Trp Leu
1 5 10 15

Trp Pro Ala Arg Ala Ala Phe Leu Ser Gly Pro Trp Thr Leu Pro Pro
20 25 30

Cys Leu Pro Asp Pro Leu Leu Ala Val Pro Lys Cys Cys Leu Thr Leu
35 40 45

Gly Ile His Leu Leu Pro Ala Trp Pro Gly Pro Pro Val Gly Gly Gly
50 55 60

Cys Ser Gln Leu His Arg Gly Cys Cys Tyr Pro Gly Met Gly Cys Leu
65 70 75 80

Asn Arg Asp Leu Cys Pro Pro Ser Leu Val Ser Arg Arg Trp Gly Asp
85 90 95

Gln Leu Leu Trp Ser Pro Asp Gly Ser Lys Ile Leu Ala Thr Thr Pro
100 105 110

Ser Ala Val Phe Arg Val Trp Glu Ala Gln Met Trp Thr Cys Glu Arg
115 120 125

Trp Pro Thr Leu Ser Gly Arg Cys Gln Thr Gly Cys Trp Ser Pro Asp
130 135 140

Gly Ser Arg Leu Leu Phe Thr Val Leu Gly Glu Pro Leu Ile Tyr Ser

145 150 155 160

Leu Ser Phe Pro Glu Arg Cys Gly Glu Gly Lys Gly Cys Val Gly Gly
165 170 175

Ala Lys Ser Ala Thr Ile Val Ala Asp Leu Ser Glu Thr Thr Ile Gln
180 185 190

Thr Pro Asp Gly Glu Glu Arg Leu Gly Gly Glu Ala His Ser Met Val
195 200 205

Trp Asp Pro Ser Gly Glu Arg Leu Ala Val Leu Met Lys Gly Lys Pro
210 215 220

Arg Val Gln Asp Gly Lys Pro Val Ile Leu Leu Phe Arg Thr Arg Asn
225 230 235 240

Ser Pro Val Phe Glu Leu Leu Pro Cys Gly Ile Ile Gln Gly Glu Pro
245 250 255

Gly Ala Gln Pro Gln Leu Ile Thr Phe His Leu Pro Ser Thr Lys Gly
260 265 270

Pro Cys Ser Val Trp Ala Gly Pro Gln Ala Glu Leu Pro Thr Ser Arg
275 280 285

Cys Thr Leu Ser Met Pro Ser Phe His Val Leu Ala Gln Cys Leu Gly
290 295 300

Gly Pro Arg Asn Pro Leu Leu Gly Val Glu Ala Leu Phe Met Thr Cys
305 310 315 320

Pro Ser Leu Leu Arg His Pro Gln Pro Leu Pro Leu Gly Thr Leu Ser
325 330 335

Gln Gly His His Leu Phe Cys Pro Thr Pro His Ile Pro Thr Ser Lys
340 345 350

Asn Lys Xaa
355

<210> 169
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (90)
<223> Xaa equals stop translation

<400> 169
Met Cys Val Cys Tyr Phe Leu Val Phe Leu Gln Ile Trp Ala Arg Leu
1 5 10 15

Ser His Leu Leu Val Trp Ile Tyr Pro Gly Ala Gly Leu Gln Pro Gly

20 25 30

Lys Gly His Pro Ala Gln Ser Leu Phe Pro His Glu His Cys His Leu
35 40 45

Met Pro Gln His Ser Leu Thr Leu Lys Ile Leu Glu Glu Lys Leu Gly
50 55 60

Gly Lys Gly Glu Ser Gly Ser Asn Phe Thr Phe Leu His Cys Lys Ile
65 70 75 80

Leu Ala Thr Ser Ala Leu Asn Phe Ser Xaa
85 90

<210> 170
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals stop translation

<400> 170
Met Val Leu Pro Phe Val Leu Leu Phe Arg Pro Asn Phe Ile Ser Val
1 5 10 15

Leu His Pro Leu Phe Tyr Ser His Cys Leu Phe Leu Tyr Leu Ile Ser
20 25 30

Pro Val His Ser Ser Ser Ile Ile Tyr Tyr Lys Pro Asp His Cys His
35 40 45

Tyr Thr Pro Phe Ile Pro Gly Leu Leu Gln Xaa
50 55

<210> 171
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (70)
<223> Xaa equals stop translation

<400> 171
Met Leu Leu Ser Lys Glu His Thr Ser Leu Gly Trp Leu Val Ile Phe
1 5 10 15

Leu Thr Leu Ala Ser Gln Leu Ile Ser Tyr Gly Ser Arg Thr Gly Asn
20 25 30

Ser Arg Cys Pro Pro Cys Leu Tyr Arg Thr Leu His Thr Val Ser Thr

100

35 40 45

Ser His Val Leu Ser Ser Leu Phe Val Ser Thr Phe Ser Gly Asp Glu
50 55 60

Leu Val Trp Thr Thr Xaa
65 70

<210> 172
<211> 79
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (79)
<223> Xaa equals stop translation

<400> 172
Met Val Leu Asp Phe Lys Arg Ala Gly Ser Phe Phe Leu Ser Phe Leu
1 5 10 15

Trp Thr Arg Glu Ala Phe Ala Phe Ile Phe Thr Leu Pro Leu Leu Leu
20 25 30

Ser Leu Cys Arg Gly Lys Met Lys Asn Ser Pro Arg Ser Asp Leu Ser
35 40 45

Arg Leu Lys Lys Asn Val Phe Asn Ala Phe Leu Pro Cys Leu Val Pro
50 55 60

Arg Phe Ile Ser Asn Arg Gly Cys Pro Val Tyr Arg Ser Cys Xaa
65 70 75

<210> 173
<211> 174
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (174)
<223> Xaa equals stop translation

<400> 173

101

```
Met Gly Val Pro Thr Ala Pro Glu Ala Gly Ser Trp Arg Trp Gly Ser
  1               5                  10                  15

Leu Leu Phe Ala Leu Phe Leu Ala Ala Ser Leu Asp Ile Thr Ala Ala
             20                  25                  30

Ala Leu Ala Thr Gly Ala Cys Ile Val Glu Ser Ser Ala Ser Pro Ser
         35                  40                  45

Ser Cys Ser Trp Ser Thr Ser Lys Gly Arg Gln Pro Pro Thr Ala Val
     50                  55                  60

Pro Arg Ser Trp Cys Gly Trp Thr Ala Thr Phe Lys Gly Leu Lys Thr
 65                  70                  75                  80

Pro Ala Leu Lys Pro His His Leu Pro Arg Gly Tyr Pro Arg Pro Lys
                 85                  90                  95

Ser Gly Thr Pro Cys Pro Met Trp Pro Ser Gly Ser Leu Leu Ser Leu
            100                 105                 110

Gly Gly Ile Cys Phe Arg Ser Pro Ala Pro Pro Cys Leu Leu Gln Ala
        115                 120                 125

Pro Glu Thr Ser Ser Ser His Pro Trp Thr Leu Ser Leu Thr Leu Gln
    130                 135                 140

Thr Leu Arg Ser Ser Xaa Pro Xaa Gly Gly Gln Trp Ala Val Val Ala
145                 150                 155                 160

Gly Ser Gly Ala Gly Ala Phe Glu Pro Gly Leu Ala Leu Xaa
                165                 170
```

<210> 174
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals stop translation

<400> 174

```
Met Phe Val Leu Trp Val Phe Lys Ile Thr Tyr Ile Tyr Ile Leu Phe
  1               5                  10                  15

Ala Lys Asn Lys Ser Leu Ala Ser Cys Gln Met Ile Ala Lys Val Asp
             20                  25                  30

Leu Thr Phe Phe Val Ile Met Tyr Ile Phe Ile His Thr Pro Asn Thr
         35                  40                  45

Leu Ser Asp Phe Cys Tyr Phe Leu Gly Ser Thr Ala Leu Arg Leu Xaa
     50                  55                  60
```

<210> 175
<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals stop translation

<400> 175
Met Ile Ser Ala Gln Ser Ser Ile Ser Trp Ala Leu Ile Phe Ile Met
1 5 10 15

Ala Pro Ala Leu His Leu Val Leu Arg Phe Pro Ser Lys Phe Lys Pro
20 25 30

Glu Arg Lys Gly Glu Ala Arg Ser Pro Lys Xaa
35 40

<210> 176
<211> 114
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (114)
<223> Xaa equals stop translation

<400> 176
Met Trp Ile Ala Gly Pro Ser Trp Val Pro Leu Arg Tyr Val Val Trp
1 5 10 15

Leu Met His Leu Glu Arg Ile Cys Ala Leu His Asn Cys Arg Gly Asn
20 25 30

Met Leu Ser Trp Pro Leu Gln Ile Arg Val Ala Val Leu Gly Cys Cys
35 40 45

Thr Lys Thr Pro Ala Val Gly Phe Leu Gln Val Ala Gly Ser Pro His
50 55 60

Ser Cys Gln Asp Pro Gly Pro Cys Ser His Ser Ala Ala Ile Phe Pro
65 70 75 80

Pro Cys Glu Arg Gly Leu Cys Gly Asp Gly Pro Arg Cys Val Arg Gly
85 90 95

Cys Val His Cys His Arg Ser Leu Leu His Glu Pro Ala Trp Thr Gln
100 105 110

Gly Xaa

<210> 177
<211> 156
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (156)
<223> Xaa equals stop translation

<400> 177

```
Met Ala Ser Ser Leu Ala Phe Leu Leu Leu Asn Phe His Val Ser Leu
  1               5                  10                  15

Leu Leu Val Gln Leu Leu Thr Pro Cys Ser Ala Gln Phe Ser Val Leu
             20                  25                  30

Gly Pro Ser Gly Pro Ile Leu Ala Met Val Gly Glu Asp Ala Asp Leu
         35                  40                  45

Pro Cys His Leu Phe Pro Thr Met Ser Ala Glu Thr Met Glu Leu Lys
     50                  55                  60

Trp Val Ser Ser Ser Leu Arg Gln Val Val Asn Val Tyr Ala Asp Gly
 65                  70                  75                  80

Lys Glu Val Glu Asp Arg Gln Ser Ala Pro Tyr Arg Gly Arg Thr Ser
                 85                  90                  95

Ile Leu Arg Asp Gly Ile Thr Ala Gly Lys Ala Ala Leu Arg Ile His
            100                 105                 110

Asn Val Thr Ala Ser Asp Ser Gly Lys Tyr Leu Cys Tyr Phe Gln Asp
        115                 120                 125

Gly Asp Phe Tyr Glu Lys Ala Leu Val Glu Leu Lys Val Ala Ala Leu
    130                 135                 140

Gly Ser Asn Leu His Val Gly Ser Glu Gly Leu Xaa
145                 150                 155
```

<210> 178
<211> 89
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (89)
<223> Xaa equals stop translation

<400> 178

```
Met Trp Pro Ser Gln Val Pro Leu Leu Ala Phe Cys Phe Leu Leu Val
 1               5                  10                  15

Lys Ser Thr Ser Asn Ile Asn Leu Pro Thr Pro Pro Pro Ser Ser Leu
            20                  25                  30

Glu Asn Ser Ser Phe Val Val Ser Gln Arg Gly Asn Leu Ile Val Phe
        35                  40                  45

Gly Gly Gln Lys Lys Ala Thr Phe Arg Tyr His Phe Tyr Leu Asp Arg
    50                  55                  60

Met Pro Phe Tyr Ser Gln Ile Ser Val Tyr Phe Val Asn Gly Phe Arg
65                  70                  75                  80

Val Asn Gly Tyr Leu Cys Asn Asn Xaa
                85
```

<210> 179
<211> 197
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (197)
<223> Xaa equals stop translation

<400> 179

```
Met Ala Phe Arg Tyr Leu Ser Trp Ile Leu Phe Pro Leu Leu Gly Cys
 1               5                  10                  15

Tyr Ala Val Tyr Ser Leu Leu Tyr Leu Glu His Lys Gly Trp Tyr Ser
            20                  25                  30

Trp Val Leu Ser Met Leu Tyr Gly Phe Leu Leu Thr Phe Gly Phe Ile
        35                  40                  45

Thr Met Thr Pro Gln Leu Phe Ile Asn Tyr Lys Leu Lys Ser Val Ala
    50                  55                  60

His Leu Pro Trp Arg Met Leu Thr Tyr Lys Ala Leu Asn Thr Phe Ile
65                  70                  75                  80

Asp Asp Leu Phe Ala Phe Val Ile Lys Met Pro Val Met Tyr Arg Ile
                85                  90                  95

Gly Cys Leu Arg Asp Asp Val Val Phe Phe Ile Tyr Leu Tyr Gln Arg
            100                 105                 110

Trp Ile Tyr Arg Val Asp Pro Thr Arg Val Asn Glu Phe Gly Met Ser
        115                 120                 125

Gly Glu Asp Pro Thr Ala Ala Ala Pro Val Ala Glu Val Pro Thr Ala
    130                 135                 140
```

105

Ala Gly Ala Leu Thr Pro Thr Pro Ala Pro Thr Thr Thr Thr Ala Thr
145 150 155 160

Arg Glu Glu Ala Ser Thr Ser Leu Pro Thr Lys Pro Thr Gln Gly Ala
165 170 175

Ser Ser Ala Ser Glu Pro Gln Glu Ala Pro Pro Lys Pro Ala Glu Asp
180 185 190

Lys Lys Lys Asp Xaa
195

<210> 180
<211> 129
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (129)
<223> Xaa equals stop translation

<400> 180
Met Tyr Glu Cys Phe Leu Ser Leu Ser Leu Leu Lys Ser Cys Lys Ala
1 5 10 15

Val Ser Gly Leu Met Cys Leu Leu Leu Pro Arg Leu Gly Leu Leu Leu
20 25 30

Leu Leu Pro Ser Glu Arg Cys Phe Cys Trp Ile Pro Val Tyr Ser Leu
35 40 45

Ile Thr Cys Leu Ala Glu Cys Ser Val Val Leu Arg Asp Pro Gly Phe
50 55 60

Ala Gly Ala Phe Gln Val His Arg Arg Gln Ala Cys Phe Ser Thr Leu
65 70 75 80

Arg Trp Ser Cys Leu Leu Leu Trp Trp Val Ser Arg Val Ser Ala Gly
85 90 95

Arg Pro Leu Ile Gly Ser Pro His Met Met Ala Pro Ser Thr Phe Cys
100 105 110

Pro Thr Val Arg Gly Pro Gly Thr Cys Ala Ser Ser Asp Pro Asp Gly
115 120 125

Xaa

<210> 181
<211> 155
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (155)
<223> Xaa equals stop translation

<400> 181
Met Pro Ala Glu Lys Arg Ile Phe Gly Ala Val Leu Leu Phe Ser Trp
1 5 10 15

Thr Val Tyr Leu Trp Glu Thr Phe Leu Ala Gln Arg Gln Arg Arg Ile
20 25 30

Tyr Lys Thr Thr Thr His Val Pro Pro Glu Leu Gly Gln Ile Met Asp
35 40 45

Ser Glu Thr Phe Glu Lys Ser Arg Leu Tyr Gln Leu Asp Lys Ser Thr
50 55 60

Phe Ser Phe Trp Ser Gly Leu Tyr Ser Glu Thr Glu Gly Thr Leu Asn
65 70 75 80

Leu Leu Phe Gly Gly Ile Pro Tyr Leu Trp Arg Leu Ser Gly Arg Phe
85 90 95

Cys Gly Tyr Ala Gly Phe Gly Pro Glu Tyr Glu Ile Thr Gln Ser Leu
100 105 110

Val Phe Leu Leu Leu Ala Thr Leu Phe Ser Ala Leu Thr Gly Val Pro
115 120 125

Trp Ser Leu Tyr Asn Thr Phe Val Ile Lys Lys Thr Trp Leu Gln Ser
130 135 140

Thr Asp Phe Gly Val Leu His Met Glu Ile Xaa
145 150 155

<210> 182
<211> 107
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (107)
<223> Xaa equals stop translation

<400> 182
Met Ser Leu Ser Trp Met Val His Leu Leu Gly Leu Pro Asn Gly Thr
1 5 10 15

Val Trp Tyr Leu Pro Phe Val Cys Phe Thr Arg Gly Ser Pro Met Gly
20 25 30

Gly Gly Ser Gly Gln Trp Arg Trp Asp Arg Lys Phe Ser Lys Thr Leu
35 40 45

Leu Gly Asn Leu Phe Val Ala Phe Lys Glu Met Cys Gly Glu Asp Ile
50 55 60

Trp Met Leu Ala Ala Ile Leu Glu Leu Arg Thr Gln Glu Trp Trp Lys
65 70 75 80

Gly Arg Arg Asn Arg Val Phe Val Ala Val Val Lys Leu Leu Lys Phe
85 90 95

Pro Ser Cys Gln Ala Ser Cys Tyr Met Arg Xaa
100 105

<210> 183
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation

<400> 183
Met Ile Asn Glu Trp Cys Phe Lys Leu Leu Ser Leu Trp Ser Phe Ala
1 5 10 15

Tyr Ser Asn Cys Lys Leu Ile His Lys Cys Lys Phe Val Phe Leu Lys
20 25 30

Lys Lys Lys Thr Gly Lys Glu Val Ser Val Lys Gly Ser Lys Leu Xaa
35 40 45

<210> 184
<211> 127
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (127)
<223> Xaa equals stop translation

<400> 184
Met Trp Leu Gly Ser Trp Leu Thr Ser Leu Leu Leu Ser Pro Tyr Gly
1 5 10 15

Ser Gly Trp Glu Lys Val Pro Cys Cys Val Thr Gly His Leu Arg Ser
20 25 30

Cys Ser Cys Cys Leu Leu Gly Leu Ala Gly Val Gln Ser Asp His Phe
35 40 45

```
Ser Glu Gly Phe Phe Ser Glu Tyr Ser Ser Asp Val Leu Pro Trp Gly
     50                  55                  60

Arg Arg Ser Phe Leu Pro Gln Gly Asp Ala Ser Leu Leu Ala Cys Glu
 65                  70                  75                  80

Cys Phe Leu His Leu Gln Val Val Trp Gly Gln Phe Cys Leu Leu Glu
                 85                  90                  95

Ala Trp Ala Gly Phe Thr Glu Gly Ser Met Pro Ala Pro Ser Cys Arg
            100                 105                 110

Val His Phe Trp Cys Arg Val Asn Thr Cys Pro Phe Met Ser Xaa
        115                 120                 125
```

<210> 185
<211> 87
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (87)
<223> Xaa equals stop translation

<400> 185

```
Met Leu Cys Gly Tyr Val Ile Asn Asn Ile Trp Leu Ile Phe Thr Tyr
  1               5                  10                  15

Phe Ile Cys Ile Tyr Ile Ser Arg Ser Tyr Ile Tyr Ile Thr Gln Glu
             20                  25                  30

Thr Gln Val Ile Tyr Ile Cys Gln Glu Met Tyr Asp Tyr Phe Gly Glu
         35                  40                  45

Asn Gly Pro Lys Cys Glu Lys Asp Ile Lys Lys Thr Lys Lys Thr Lys
     50                  55                  60

Lys Lys His Tyr Phe Pro Leu Arg Asn Ile Leu Tyr Ile Ser Lys Glu
 65                  70                  75                  80

Glu Lys Leu Lys Asp Ile Xaa
                 85
```

<210> 186
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals stop translation

<400> 186

```
Met Ile Val Ser Tyr Arg Ile Val Ser Leu Pro Ser Ser Val Leu Cys
  1               5                  10                  15

Leu Phe Ile Pro Pro Phe Leu Leu Ile Phe Tyr Cys Leu His Ser Phe
             20                  25                  30

Val Phe Ser Gln Met Leu Tyr Ser Trp Asn Tyr His Val Thr Phe Gln
         35                  40                  45

Met Ala Phe Ser Leu Ile Ile Cys Val Xaa
     50                  55
```

<210> 187
<211> 69
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (69)
<223> Xaa equals stop translation

<400> 187

```
Met Val Ala Ser Gln Ala Trp Trp Leu Ser Asn Leu Trp His Leu Trp
  1               5                  10                  15

Glu Val Gly Ser Ala Gln Gly Leu Pro Leu Asp Pro Pro Ala Leu Ala
             20                  25                  30

Pro Tyr Leu Pro Trp Ala Leu Arg Trp Pro Cys Phe Ser Gly Phe Ala
         35                  40                  45

Ser Leu Ala Gly Ala Leu Val Leu Ala His Ser Leu Pro Thr Ala Trp
     50                  55                  60

Pro Gly Ser Ser Xaa
 65
```

<210> 188
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation

<400> 188

```
Met Tyr Leu Phe Leu Leu Cys Cys Phe Ile Ser Glu His Cys Ala Gln
  1               5                  10                  15

His Ser Phe Pro His Thr Cys Pro Asn Trp Lys Thr Arg Val Leu Ser
             20                  25                  30
```

110

Phe Pro Leu His Pro Cys Pro His Leu Ile His Pro Asn Asn Thr Xaa
35 40 45

<210> 189
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals stop translation

<400> 189
Met Leu Ser Ser Xaa Tyr Val Pro Met Cys Gln His Phe Ile Tyr Pro
1 5 10 15

Val Leu Trp Val Leu Val His Phe Phe Ser Phe Ile Gln Ile Gln Lys
20 25 30

Asn Thr Asp Gly Ser Asn Val Lys Leu Thr Arg Asn Pro Gly Thr Phe
35 40 45

Ile Ser Xaa
50

<210> 190
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (56)
<223> Xaa equals stop translation

<400> 190
Met Ala Val Arg Val Leu Trp Gly Gly Leu Ser Leu Leu Arg Val Leu
1 5 10 15

Trp Cys Leu Leu Pro Gln Thr Gly Tyr Val His Pro Asp Glu Phe Phe
20 25 30

Gln Ser Pro Glu Val Met Ala Gly Lys Thr Pro His Val Trp Leu Arg
35 40 45

Gln Ala Ala Ala Glu Ser Ala Xaa

50 55

<210> 191
<211> 127
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (127)
<223> Xaa equals stop translation

<400> 191
Met Cys Ser Ser Phe Pro Arg Met Ala Leu Cys Ala Leu Trp Met Trp
1 5 10 15

Pro Ser Val Lys Ser Ser Val Pro Leu Pro Leu Arg Glu Pro Phe Leu
20 25 30

Trp Arg Ser Pro Gly Ser Gln Cys Leu Leu Cys Leu Gln Thr Ile His
35 40 45

Val Ser Cys Ser Glu Ala Cys Pro Leu Leu Glu Asn Ile Ser Lys Asn
50 55 60

Cys Thr Ile Pro Gln Arg Asp Leu Asp Asn Met Ala Phe Pro Gln Ala
65 70 75 80

Leu Pro Leu Glu Lys Arg Cys Glu Arg Phe Leu Gln Lys Ser Tyr Arg
85 90 95

Lys Leu Glu Lys Asn Pro Glu Lys Glu Glu Glu His Trp Ala Arg Leu
100 105 110

Gln Arg Tyr Ser Leu Ser Leu Gln Arg Glu Asn Phe Lys Lys Xaa
115 120 125

<210> 192
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (70)
<223> Xaa equals stop translation

<400> 192
Met Pro Phe Gln Leu Pro Leu Gln Leu Leu Leu Leu Arg Leu Ile Cys
1 5 10 15

Glu Phe Phe Leu Ala Pro Ala Leu Asn Cys Asn Leu Thr Gly Thr Val
20 25 30

Ile Phe Phe Thr Leu Met Ile Ser Leu Gln Leu Met Ile Phe Phe Thr

35 40 45

Leu Gln Phe Ala Asp Gly Phe Gln Ile Gly Val Asp Leu Gln Leu Ser
50 55 60

Glu Leu Asn Ile Leu Xaa
65 70

<210> 193
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (71)
<223> Xaa equals stop translation

<400> 193
Met Ile Ser Gly Val Leu Ile Phe Asn Leu Ile Ala Ser Ser Trp Val
1 5 10 15

Leu Cys Phe Pro Leu Cys Asp Leu Ser Cys Gln Lys Thr Leu Arg Ile
20 25 30

Phe Phe Ala Ser Phe Phe His Ala Val Cys Val His Val Ser Cys Thr
35 40 45

Ser Trp Gln Pro Leu Val Leu Phe Ile Lys Trp Trp Val Val Gly Cys
50 55 60

Ser Pro Ala Val Ser Leu Xaa
65 70

<210> 194
<211> 130
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (130)
<223> Xaa equals stop translation

<400> 194
Met His Val Leu Pro Leu Leu Leu Ser Leu Leu Leu Leu Leu Leu Leu
1 5 10 15

Leu Ser Ala Ser Phe Val Thr Phe Ser Thr Pro Thr Ser Ser Arg Asn
20 25 30

Ser Ser Cys Pro Asp Cys Glu Ser Leu Asn Thr Gly Leu Pro Ser Leu
35 40 45

Met Met Phe Gly Gly Ser Leu Leu Lys Trp Val Gln Asn Thr His Gly

50 55 60

Val Glu Ser Leu Leu Ser Ser Ala Lys Val Arg Leu Leu Pro Pro Ala
65 70 75 80

Leu Gly Val Leu Phe Pro Arg Leu His Pro Gly Thr Leu Thr Leu Val
85 90 95

Phe Leu Leu Ile Pro Phe Leu Thr Val Ser Ser Ser Thr Ser Asp Val
100 105 110

Leu Ser Ser Leu Glu Ser Pro Lys Leu Ser Val Thr Ile Phe His Tyr
115 120 125

Cys Xaa
130

<210> 195
<211> 55
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (55)
<223> Xaa equals stop translation

<400> 195
Met Pro Trp Ile Leu Met Leu Leu Phe Thr Met Gly Gln Gly Val Val
1 5 10 15

Ile Leu Ala Phe Arg Ser Cys Leu Glu Ala Glu Val Arg Gly Val Pro
20 25 30

Gly Arg Gly Asn Arg Ser Gly Val Lys Thr Val Val Glu Ala Pro Ala
35 40 45

Val Phe Ala Lys Arg Pro Xaa
50 55

<210> 196
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> Xaa equals stop translation

<400> 196
Met Ala Ala Phe Phe Ala Leu Ala Ala Leu Val Gln Val Val Tyr Thr
1 5 10 15

Ile Pro Ala Val Leu Thr Leu Leu Val Gly Leu Asn Pro Glu Val Thr

```
            20                  25                  30

Gly Asn Val Ile Trp Lys Ser Ile Ser Ala Ile His Ile Leu Phe Cys
        35                  40                  45

Thr Val Trp Ala Val Gly Leu Ala Ser Tyr Leu Leu His Arg Thr Gln
    50                  55                  60

Gln Asn Ile Leu His Glu Glu Glu Gly Arg Ser Cys Leu Val Trp Xaa
65                  70                  75                  80
```

<210> 197
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals stop translation

<400> 197

```
Met Lys His Met Asn Thr Leu Pro Ile Phe Ser Ser Leu Ile Ser Phe
  1               5                  10                  15

Leu Pro Ala Val Ser Ala Gly Arg Ser Ala Ile Thr Thr Leu Cys Asn
            20                  25                  30

Ile Thr Glu Gln Leu Glu Val Leu Gly Xaa
        35                  40
```

<210> 198
<211> 197
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (197)
<223> Xaa equals stop translation

<400> 198

```
Met Lys Tyr Leu Arg His Arg Arg Pro Asn Ala Thr Leu Ile Leu Ala
  1               5                  10                  15

Ile Gly Ala Phe Thr Leu Leu Leu Phe Ser Leu Leu Val Ser Pro Pro
            20                  25                  30

Thr Cys Lys Val Gln Glu Gln Pro Pro Ala Ile Pro Glu Ala Leu Ala
        35                  40                  45

Trp Pro Thr Pro Pro Thr Arg Pro Ala Pro Ala Pro Cys His Ala Asn
```

115

50 55 60

Thr Ser Met Val Thr His Pro Asp Phe Ala Thr Gln Pro Gln His Val
65 70 75 80

Gln Asn Phe Leu Leu Tyr Arg His Cys Arg His Phe Pro Leu Leu Gln
85 90 95

Asp Val Pro Pro Ser Lys Cys Ala Gln Pro Val Phe Leu Leu Leu Val
100 105 110

Ile Lys Ser Ser Pro Ser Asn Tyr Val Arg Arg Glu Leu Leu Arg Arg
115 120 125

Thr Trp Gly Arg Glu Arg Lys Val Arg Gly Leu Gln Leu Arg Leu Leu
130 135 140

Phe Leu Val Gly Thr Ala Ser Asn Pro His Glu Ala Arg Lys Val Asn
145 150 155 160

Arg Leu Leu Glu Leu Glu Ala Gln Thr His Gly Asp Ile Leu Gln Trp
165 170 175

Asp Phe His Asp Ser Phe Phe Asn Leu Thr Leu Lys Gln Val Arg Trp
180 185 190

Thr Gly Val Thr Xaa
195

<210> 199
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (124)
<223> Xaa equals stop translation

<400> 199
Met Lys Leu Leu Leu Leu Ala Leu Pro Met Leu Val Leu Leu Pro Gln
1 5 10 15

Val Ile Pro Ala Tyr Ser Gly Glu Lys Lys Cys Trp Asn Arg Ser Gly
20 25 30

His Cys Arg Lys Gln Cys Lys Asp Gly Glu Ala Val Lys Asp Thr Cys
35 40 45

Lys Asn Leu Arg Ala Cys Cys Ile Pro Ser Asn Glu Asp His Arg Arg
50 55 60

Val Pro Ala Thr Ser Pro Thr Pro Leu Ser Asp Ser Thr Pro Gly Ile
65 70 75 80

Ile Asp Asp Ile Leu Thr Val Arg Phe Thr Thr Asp Tyr Phe Glu Val

85 90 95

Ser Ser Lys Lys Asp Met Val Glu Glu Ser Glu Ala Gly Arg Gly Thr
100 105 110

Glu Thr Ser Leu Pro Asn Val His His Ser Ser Xaa
115 120

<210> 200
<211> 549
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (398)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 200
Met Gly Asn Ala Cys Ile Pro Leu Lys Arg Ile Ala Tyr Phe Leu Cys
1 5 10 15

Leu Leu Ser Ala Leu Leu Leu Thr Glu Gly Lys Lys Pro Ala Lys Pro
20 25 30

Lys Cys Pro Ala Val Cys Thr Cys Thr Lys Asp Asn Ala Leu Cys Glu
35 40 45

Asn Ala Arg Ser Ile Pro Arg Thr Val Pro Pro Asp Val Ile Ser Leu
50 55 60

Ser Phe Val Arg Ser Gly Phe Thr Glu Ile Ser Glu Gly Ser Phe Leu
65 70 75 80

Phe Thr Pro Ser Leu Gln Leu Leu Leu Phe Thr Ser Asn Ser Phe Asp
85 90 95

Val Ile Ser Asp Asp Ala Phe Ile Gly Leu Pro His Leu Glu Tyr Leu
100 105 110

Phe Ile Glu Asn Asn Asn Ile Lys Ser Ile Ser Arg His Thr Phe Arg
115 120 125

Gly Leu Lys Xaa Leu Ile His Leu Ser Leu Ala Asn Asn Asn Leu Gln
130 135 140

Thr Leu Pro Lys Asp Ile Phe Lys Gly Leu Asp Ser Leu Thr Asn Val
145 150 155 160

Asp Leu Arg Gly Asn Ser Phe Asn Cys Asp Cys Lys Leu Lys Trp Leu
165 170 175

Val Glu Trp Leu Gly His Thr Asn Ala Thr Val Glu Asp Ile Tyr Cys
180 185 190

Glu Gly Pro Pro Glu Tyr Lys Lys Arg Lys Ile Asn Ser Leu Ser Ser
195 200 205

Lys Asp Phe Asp Cys Ile Ile Thr Glu Phe Ala Lys Ser Gln Asp Leu
210 215 220

Pro Tyr Gln Ser Leu Ser Ile Asp Thr Phe Ser Tyr Leu Asn Asp Glu
225 230 235 240

Tyr Val Val Ile Ala Gln Pro Phe Thr Gly Lys Cys Ile Phe Leu Glu
245 250 255

Trp Asp His Val Glu Lys Thr Phe Arg Asn Tyr Asp Asn Ile Thr Gly
260 265 270

Thr Ser Thr Val Val Cys Lys Pro Ile Val Ile Glu Thr Gln Leu Tyr
275 280 285

Val Ile Val Ala Gln Leu Phe Gly Gly Ser His Ile Tyr Lys Arg Asp
290 295 300

Ser Phe Ala Asn Lys Phe Ile Lys Ile Gln Asp Ile Glu Ile Leu Lys
305 310 315 320

Ile Arg Lys Pro Asn Asp Ile Glu Thr Phe Lys Ile Glu Asn Asn Trp
325 330 335

Tyr Phe Val Val Ala Asp Ser Ser Lys Ala Gly Phe Thr Thr Ile Tyr
340 345 350

Lys Trp Asn Gly Asn Gly Phe Tyr Ser His Gln Ser Leu His Ala Trp
355 360 365

Tyr Arg Asp Thr Asp Val Glu Tyr Leu Glu Ile Val Arg Thr Pro Gln
370 375 380

Thr Leu Arg Thr Pro His Leu Ile Leu Ser Ser Ser Ser Xaa Arg Pro
385 390 395 400

Val Ile Tyr Gln Trp Asn Lys Ala Thr Gln Leu Phe Thr Asn Gln Thr
405 410 415

Asp Ile Pro Asn Met Glu Asp Val Tyr Ala Val Lys His Phe Ser Val
420 425 430

Lys Gly Asp Val Tyr Ile Cys Leu Thr Arg Phe Ile Gly Asp Ser Lys
435 440 445

Val Met Lys Trp Gly Gly Ser Ser Phe Gln Asp Ile Gln Arg Met Pro
450 455 460

Ser Arg Gly Ser Met Val Phe Gln Pro Leu Gln Ile Asn Asn Tyr Gln
465 470 475 480

Tyr Ala Ile Leu Gly Ser Asp Tyr Ser Phe Thr Gln Val Tyr Asn Trp
485 490 495

Asp Ala Glu Lys Ala Lys Phe Val Lys Phe Gln Glu Leu Asn Val Gln
500 505 510

Ala Pro Arg Ser Phe Thr His Val Ser Ile Asn Lys Arg Asn Phe Leu
515 520 525

Phe Ala Ser Ser Phe Lys Gly Asn Thr Gln Ile Tyr Lys His Val Ile
530 535 540

Val Asp Leu Ser Ala
545

<210> 201
<211> 488
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (344)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (416)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (429)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (430)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 201
Met Ile Leu Ser Leu Leu Phe Ser Leu Gly Gly Pro Leu Gly Trp Gly
1 5 10 15

Leu Leu Gly Ala Trp Ala Gln Ala Ser Ser Thr Ser Leu Ser Asp Leu
20 25 30

Gln Ser Ser Arg Thr Pro Gly Val Trp Lys Ala Glu Ala Glu Asp Thr
35 40 45

Ser Lys Asp Pro Val Gly Arg Asn Trp Cys Pro Tyr Pro Met Ser Lys
50 55 60

Leu Val Thr Leu Leu Ala Leu Cys Lys Thr Glu Lys Phe Leu Ile His
65 70 75 80

Ser Gln Gln Pro Cys Pro Gln Gly Ala Pro Asp Cys Gln Lys Val Lys
85 90 95

Val Met Tyr Arg Met Ala His Lys Pro Val Tyr Gln Val Lys Gln Lys
100 105 110

Val Leu Thr Ser Leu Ala Trp Arg Cys Cys Pro Gly Tyr Thr Gly Pro
115 120 125

Asn Cys Glu His His Asp Ser Met Ala Ile Pro Glu Pro Ala Asp Pro
130 135 140

Gly Asp Ser His Gln Glu Pro Gln Asp Gly Pro Val Ser Phe Lys Pro
145 150 155 160

Gly His Leu Ala Ala Val Ile Asn Glu Val Glu Val Gln Gln Glu Gln
165 170 175

Gln Glu His Leu Leu Gly Asp Leu Gln Asn Asp Val His Arg Val Ala
180 185 190

Asp Ser Leu Pro Gly Leu Trp Lys Ala Leu Pro Gly Asn Leu Thr Ala
195 200 205

Ala Val Met Glu Ala Asn Gln Thr Gly His Glu Phe Pro Asp Arg Ser
210 215 220

Leu Glu Gln Val Leu Leu Pro His Val Asp Thr Phe Leu Gln Val His
225 230 235 240

Phe Ser Pro Ile Trp Arg Ser Phe Asn Gln Ser Leu His Ser Leu Thr
245 250 255

Gln Ala Ile Arg Asn Leu Ser Leu Asp Val Glu Ala Asn Arg Gln Ala
260 265 270

Ile Ser Arg Val Gln Asp Ser Ala Val Ala Arg Ala Asp Phe Gln Glu
275 280 285

Leu Gly Ala Lys Phe Glu Ala Lys Val Gln Glu Asn Thr Gln Arg Val
290 295 300

Gly Gln Leu Arg Gln Asp Val Glu Glu Arg Leu His Ala Gln His Phe
305 310 315 320

Thr Leu His Arg Ser Ile Ser Glu Leu Gln Ala Asp Val Asp Thr Lys
325 330 335

Leu Lys Arg Leu His Lys Ala Xaa Glu Ala Pro Gly Thr Asn Gly Ser
340 345 350

Leu Val Leu Ala Thr Pro Gly Ala Gly Ala Arg Pro Glu Pro Asp Ser
355 360 365

Leu Gln Ala Arg Leu Gly Gln Leu Gln Arg Asn Leu Ser Glu Leu His
370 375 380

```
Met Thr Thr Ala Arg Arg Glu Glu Glu Leu Gln Tyr Thr Leu Glu Asp
385                 390                 395                 400

Met Arg Ala Thr Leu Thr Arg His Val Asp Glu Ile Lys Glu Leu Xaa
                405                 410                 415

Ser Glu Ser Asp Glu Thr Phe Asp Gln Ile Ser Lys Xaa Xaa Arg Gln
            420                 425                 430

Val Glu Glu Leu Gln Val Asn His Thr Ala Leu Arg Glu Leu Arg Val
        435                 440                 445

Ile Leu Met Glu Lys Ser Leu Ile Met Glu Glu Asn Lys Glu Glu Val
    450                 455                 460

Glu Arg Gln Leu Leu Glu Leu Asn Leu Thr Leu Gln His Leu Gln Gly
465                 470                 475                 480

Gly Met Pro Thr Ser Ser Ser Thr
                485
```

<210> 202
<211> 86
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (86)
<223> Xaa equals stop translation

<400> 202

```
Met Ala His Gly Pro Gln Ser Leu Trp Ser Leu Gly Phe Thr Val Thr
  1               5                  10                  15

Leu Thr Phe Glu Leu Pro Val Gly Cys Val Leu Gly Arg Ile Cys His
             20                  25                  30

Pro Ile Gln Ala Cys Asn Thr Gly Leu Met Thr Pro Thr Pro Gln Gly
         35                  40                  45

Pro Cys Arg Thr Glu Met Met Ser Asn Asp Lys Pro Trp Leu Pro Ala
     50                  55                  60

Asn Ala Pro Ala His Ile Ser Leu Pro Gly Ala Arg Leu Thr Ser Thr
 65                  70                  75                  80

Cys Ala Pro Gly Leu Xaa
                85
```

<210> 203
<211> 400
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (400)
<223> Xaa equals stop translation

<400> 203

```
Met Ala Ile His Lys Ala Leu Val Met Cys Leu Gly Leu Pro Leu Phe
  1               5                  10                  15

Leu Phe Pro Gly Ala Trp Ala Gln Gly His Val Pro Pro Gly Cys Ser
             20                  25                  30

Gln Gly Leu Asn Pro Leu Tyr Tyr Asn Leu Cys Asp Arg Ser Gly Ala
         35                  40                  45

Trp Gly Ile Val Leu Glu Ala Val Ala Gly Ala Gly Ile Val Thr Thr
     50                  55                  60

Phe Val Leu Thr Ile Ile Leu Val Ala Ser Leu Pro Phe Val Gln Asp
 65                  70                  75                  80

Thr Lys Lys Arg Ser Leu Leu Gly Thr Gln Val Phe Phe Leu Leu Gly
                 85                  90                  95

Thr Leu Gly Leu Phe Cys Leu Val Phe Ala Cys Val Val Lys Pro Asp
            100                 105                 110

Phe Ser Thr Cys Ala Ser Arg Arg Phe Leu Phe Gly Val Leu Phe Ala
        115                 120                 125

Ile Cys Phe Ser Cys Leu Ala Ala His Val Phe Ala Leu Asn Phe Leu
    130                 135                 140

Ala Arg Lys Asn His Gly Pro Arg Gly Trp Val Ile Phe Thr Val Ala
145                 150                 155                 160

Leu Leu Leu Thr Leu Val Glu Val Ile Ile Asn Thr Glu Trp Leu Ile
                165                 170                 175

Ile Thr Leu Val Arg Gly Ser Gly Glu Gly Gly Pro Gln Gly Asn Ser
            180                 185                 190

Ser Ala Gly Trp Ala Val Ala Ser Pro Cys Ala Ile Ala Asn Met Asp
        195                 200                 205

Phe Val Met Ala Leu Ile Tyr Val Met Leu Leu Leu Leu Gly Ala Phe
    210                 215                 220

Leu Gly Ala Trp Pro Ala Leu Cys Gly Arg Tyr Lys Arg Trp Arg Lys
225                 230                 235                 240

His Gly Val Phe Val Leu Leu Thr Thr Ala Thr Ser Val Ala Ile Trp
                245                 250                 255

Val Val Trp Ile Val Met Tyr Thr Tyr Gly Asn Lys Gln His Asn Ser
            260                 265                 270
```

```
Pro Thr Trp Asp Asp Pro Thr Leu Ala Ile Ala Leu Ala Ala Asn Ala
        275                 280                 285

Trp Ala Phe Val Leu Phe Tyr Val Ile Pro Glu Val Ser Gln Val Thr
    290                 295                 300

Lys Ser Ser Pro Glu Gln Ser Tyr Gln Gly Asp Met Tyr Pro Thr Arg
305                 310                 315                 320

Gly Val Gly Tyr Glu Thr Ile Leu Lys Glu Gln Lys Gly Gln Ser Met
                325                 330                 335

Phe Val Glu Asn Lys Ala Phe Ser Met Asp Glu Pro Val Ala Ala Lys
            340                 345                 350

Arg Pro Val Ser Pro Tyr Ser Gly Tyr Asn Gly Gln Leu Leu Thr Ser
        355                 360                 365

Val Tyr Gln Pro Thr Glu Met Ala Leu Met His Lys Val Pro Ser Glu
    370                 375                 380

Glu Leu Thr Thr Ser Ser Ser His Gly Pro Pro Pro Thr Ala Arg Xaa
385                 390                 395                 400
```

<210> 204
<211> 195
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (195)
<223> Xaa equals stop translation

<400> 204

```
Met Ser Thr Ala Phe Cys Pro Ile His Ser Ser Leu Gly Ser Met Val
  1               5                  10                  15

Met Cys Leu Cys Ile Leu Ser Pro Leu Cys Ile Ala Ser Lys Ser Leu
            20                  25                  30

Arg Val Cys Thr Lys Ser Tyr Met Glu Gly His Gly Lys Thr Arg Val
        35                  40                  45

Pro Val Val Leu Val Gly Asn Lys Ala Asp Leu Ser Pro Glu Arg Glu
    50                  55                  60

Val Gln Ala Val Glu Gly Lys Lys Leu Ala Glu Ser Trp Gly Ala Thr
65                  70                  75                  80

Phe Met Glu Ser Ser Ala Arg Glu Asn Gln Leu Thr Gln Gly Ile Phe
                85                  90                  95
```

```
Thr Lys Val Ile Gln Glu Ile Ala Arg Val Gly Glu Phe Leu Trp Ala
            100                 105                 110

Arg Ala Ser Leu Pro Ser His Val Ser Pro Trp Val Trp Gly Asn Cys
        115                 120                 125

Leu Ala Ser Ala Pro Gly Thr Cys His Val Pro Val Gly Gly Arg Ser
    130                 135                 140

Ser Gly Leu His Gly Tyr Gly Cys Gln Leu Cys Ser Trp Pro Leu Asp
145                 150                 155                 160

Thr Gln Cys Gly Ile Leu Met Phe Ala His Phe Pro Gln Ala Pro Val
                165                 170                 175

Ala Trp Met Ser Met Phe Thr Lys Gly Gln Gly Pro Leu Met Asp Thr
            180                 185                 190

Gly Leu Xaa
        195
```

<210> 205
<211> 57
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (57)
<223> Xaa equals stop translation

<400> 205

```
Met Pro Leu Glu Glu Ser Phe Glu Ile Val Leu Lys Leu Val Pro Leu
  1               5                  10                  15

Leu Gly Leu Glu Leu Phe Phe Phe Leu Phe Ile Ile Asn Gly Tyr Ile
             20                  25                  30

Asn Val Tyr Cys Pro Ser Gln Tyr Phe Ile Tyr Ala Lys Asp Ser Leu
         35                  40                  45

Ala Gly Leu Ala Leu Ile Pro Gln Xaa
     50                  55
```

<210> 206
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (73)
<223> Xaa equals stop translation

<400> 206
Met Ile Val Ile Tyr Leu Thr Leu Thr Trp Thr Phe Leu Ile Asn Leu
1 5 10 15

Leu Ala Cys Pro Leu Tyr His Leu Pro Gln Met Gln Lys Lys Ala Lys
20 25 30

Pro Glu Thr Lys Lys Ala Lys Pro Glu Thr Lys Glu Thr Ile Gln Arg
35 40 45

Gln Arg Asn Leu Phe Leu Val Leu Leu Lys Gln Leu Ala Gly Lys Lys
50 55 60

Cys Ser Ala Leu Phe Leu Ile Val Xaa
65 70

<210> 207
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (85)
<223> Xaa equals stop translation

<400> 207
Met Val Trp Cys Gln Cys Leu Cys Pro Leu Cys Ala Cys Trp Glu Glu
1 5 10 15

Ala Gln Ala Leu Trp Trp Pro Pro Leu Cys Thr Trp Pro Gly Glu Ala
20 25 30

Arg Gly Ser Gly Ala Ser Leu Arg Leu Arg Pro Pro Leu Gln Asn Lys
35 40 45

Leu Ser Pro Gly Val Cys Leu Ser Leu Phe Leu Ser Pro Glu Arg Asn
50 55 60

Ala Gly Val Pro Glu Ala Ser Leu Gln Thr Lys His Pro Cys Thr Ser
65 70 75 80

Tyr Gly Ser Gly Xaa
85

<210> 208
<211> 195
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (195)
<223> Xaa equals stop translation

<400> 208
Met Trp Val Ser Leu Tyr Phe Gly Ile Leu Gly Leu Cys Ser Val Ile
1 5 10 15

Thr Gly Gly Cys Ile Ile Phe Leu His Trp Arg Lys Asn Leu Arg Arg
20 25 30

Glu Glu His Ala Gln Gln Trp Val Glu Val Met Arg Ala Ala Thr Phe
35 40 45

Thr Tyr Ser Pro Leu Leu Tyr Trp Ile Asn Lys Arg Arg Arg Tyr Gly
50 55 60

Met Asn Ala Ala Ile Asn Thr Gly Pro Ala Pro Ala Val Thr Lys Thr
65 70 75 80

Glu Thr Glu Val Gln Asn Pro Asp Val Leu Trp Asp Leu Asp Ile Pro
85 90 95

Glu Gly Arg Ser His Ala Asp Gln Asp Ser Asn Pro Lys Ala Glu Ala
100 105 110

Pro Ala Pro Leu Gln Pro Ala Leu Gln Leu Ala Pro Gln Gln Pro Gln
115 120 125

Ala Arg Ser Pro Phe Pro Leu Pro Ile Phe Gln Glu Val Pro Phe Ala
130 135 140

Pro Pro Leu Cys Asn Leu Pro Pro Leu Leu Asn His Ser Val Ser Tyr
145 150 155 160

Pro Leu Ala Thr Cys Pro Glu Arg Asn Val Leu Phe His Ser Leu Leu
165 170 175

Asn Leu Ala Gln Glu Asp His Ser Phe Asn Ala Lys Pro Phe Pro Ser
180 185 190

Glu Leu Xaa
195

<210> 209
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals stop translation

<400> 209
Met Leu Gln Arg Gly Gln His Leu Tyr Leu Val Val Phe Leu Met Val
1 5 10 15

Ser Phe Ile Pro Leu Leu Asn Pro Lys Gln Asp Leu Lys Lys Leu Lys
20 25 30

Lys Asn Arg Thr Val Arg Asn His Phe Xaa
35 40

<210> 210
<211> 282
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (282)
<223> Xaa equals stop translation

<400> 210
Met Ser Ile Leu Thr Met Ile Ser Ser Trp Pro Phe Ser Arg Val Val
1 5 10 15

Arg Phe Trp Phe Leu His Gln Met Val Leu Asp Leu Cys Leu Gly Gln
20 25 30

Gly Val Pro Gln Gln Asn Leu Gly Lys Pro Lys Gly Lys Lys Lys Leu
35 40 45

Ser Ser Val Arg Gln Lys Phe Asp His Arg Phe Gln Pro Gln Asn Pro
50 55 60

Leu Ser Gly Ala Gln Gln Phe Val Ala Lys Asp Pro Gln Asp Asp Asp
65 70 75 80

Asp Leu Lys Leu Cys Ser His Thr Met Met Leu Pro Thr Arg Gly Gln
85 90 95

Leu Glu Gly Arg Met Ile Val Thr Ala Tyr Glu His Gly Leu Asp Asn
100 105 110

Val Thr Glu Glu Ala Val Ser Ala Val Val Tyr Ala Val Glu Asn His
115 120 125

Leu Lys Asp Ile Leu Thr Ser Val Val Ser Arg Arg Lys Ala Tyr Arg
130 135 140

Leu Arg Asp Gly His Phe Lys Tyr Ala Phe Gly Ser Asn Val Thr Pro
145 150 155 160

Gln Pro Tyr Leu Lys Asn Ser Val Val Ala Tyr Asn Asn Leu Ile Glu
165 170 175

Ser Pro Pro Ala Phe Thr Ala Pro Cys Ala Gly Gln Asn Pro Ala Ser
180 185 190

His Pro Pro Pro Asp Asp Ala Glu Gln Gln Ala Ala Leu Leu Leu Ala
195 200 205

Cys Ser Gly Asp Thr Leu Pro Ala Ser Leu Pro Pro Val Asn Met Tyr
210 215 220

```
Asp Leu Phe Glu Ala Leu Gln Val His Arg Glu Val Ile Pro Thr His
225                 230                 235                 240

Thr Val Tyr Ala Leu Asn Ile Glu Arg Ile Ile Thr Lys Leu Trp His
                245                 250                 255

Pro Asn His Glu Glu Leu Gln Gln Asp Lys Val His Arg Gln Arg Leu
            260                 265                 270

Ala Ala Lys Glu Gly Leu Leu Leu Cys Xaa
        275                 280
```

<210> 211
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation

<400> 211

```
Met Pro Lys Thr Cys Leu Pro Ile Leu Cys Leu Pro Leu Thr Gln Ala
  1               5                  10                  15

Val Val Leu Ala Gln Leu Asn Asn Phe Ser Ser Leu Asn Ile Phe Ile
             20                  25                  30

Phe Lys Ile Lys Asn Lys Met Tyr Tyr Ile Trp Ile Tyr Asp Lys Xaa
         35                  40                  45
```

<210> 212
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals stop translation

<400> 212

```
Met Trp Pro Cys Cys Leu Asp Ser Leu Leu Phe Gly Phe Trp Leu Trp
  1               5                  10                  15

Ala Gln Gly Ile Thr Leu Leu Ser Glu Asp Ser Ile Arg Ile Val Cys
             20                  25                  30

Ser Ser Cys Glu Pro Glu Val Leu His Val Pro Thr Pro Val Tyr Arg
         35                  40                  45
```

Pro Cys Pro Ser His Ser Pro Leu Thr Phe Xaa
50 55

<210> 213
<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals stop translation

<400> 213
Met Ala Leu Gln Ser Ile Pro Ser Phe Thr Leu Leu Ile Ser Phe Phe
1 5 10 15

Leu Ser Thr Gln Cys Leu Arg Cys Val Tyr Asn Tyr Glu Cys Ile Leu
20 25 30

Phe Met Ala Phe Asn Cys Arg Met Val Phe Xaa
35 40

<210> 214
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> Xaa equals stop translation

<400> 214
Met Pro Ala Val Ser Ala Phe Phe Ser Leu Ala Ala Leu Ala Glu Val
1 5 10 15

Ala Ala Met Glu Asn Val His Arg Gly Gln Arg Ser Thr Pro Leu Thr
20 25 30

His Asp Gly Gln Pro Lys Glu Met Pro Gln Ala Pro Val Leu Ile Ser
35 40 45

Cys Ala Asp Gln Xaa
50

<210> 215
<211> 68
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

<222> (68)
<223> Xaa equals stop translation

<400> 215
Met Cys Thr Gln Ile Leu Val Phe Met Leu Leu Ile Lys Cys Ile Phe
1 5 10 15

Ser Ile Asn Thr His Pro Ile Met Pro Tyr Leu Tyr Met Lys Asn Lys
20 25 30

Val Thr Met Leu Tyr Cys Tyr Val Leu Lys Phe Lys Ser Leu Phe Glu
35 40 45

Lys Pro Ser Asn Trp Cys Phe His Tyr Ile Met Ile His Leu Asp Lys
50 55 60

Thr Pro Asn Xaa
65

<210> 216
<211> 57
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (57)
<223> Xaa equals stop translation

<400> 216
Met Leu Phe Val Ser Leu Leu Val Met Trp Asn Leu Phe Leu Ser Ser
1 5 10 15

Asp Phe Leu Phe Leu Trp Ser Val Leu Gly Tyr Tyr Met Lys Val Arg
20 25 30

Leu Pro Gln Ser Pro Arg Glu Ala His Cys Val Leu Leu Ile Asp Leu
35 40 45

Lys Met Ile Glu Ser Leu Gly Gly Xaa
50 55

<210> 217
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (56)
<223> Xaa equals stop translation

<400> 217
Met Glu Gln Leu Leu Ala Ala Val Val Phe Phe Ser Ile Phe Phe Leu
1 5 10 15

```
Asn Leu Leu Ala Leu Lys Met Asn Lys Val Tyr Arg Cys Ile Cys Leu
            20                  25                  30

Leu Phe Ser Lys Asn Met His Thr Asn Val Cys Phe Tyr Lys Ser Asn
        35                  40                  45

Thr His Val Ile Ile Cys Met Xaa
    50                  55
```

<210> 218
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals stop translation

<400> 218

```
Met Cys Trp Lys Pro Lys Cys Ile Leu Leu Leu Ser Phe Val Phe Gln
  1               5                  10                  15

Cys Val Ala Ser Ser Thr Phe Asp Pro Leu Gly Ser Glu Arg Pro Trp
            20                  25                  30

Ser Gln Pro Gln Cys Pro Ile Ser Phe Pro Leu Leu Ile Thr Gly Cys
        35                  40                  45

Cys Trp Phe Ser Met Ser Arg Val Ser Xaa
    50                  55
```

<210> 219
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals stop translation

<400> 219

```
Met Arg Thr Phe Leu Thr Phe Val Ile Leu Lys Val Ile Leu Ile Phe
  1               5                  10                  15

Leu Ser Ser Cys Ala Ser Phe Thr Arg Asn Leu Leu Thr Trp Pro Asn
            20                  25                  30

Asp Val Ser Thr Glu Gln Phe Glu Thr Arg Pro Phe Gly Ser Glu Leu
        35                  40                  45

Leu Gln Thr Val Ile Asn Val Ser Arg Thr Xaa
    50                  55
```

<210> 220
<211> 45
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals stop translation

<400> 220
Met Arg Phe Phe Phe Gln Ala Tyr Ser Gln Ile Cys Val Gln Asn Phe
1 5 10 15

Leu Thr Phe Leu Leu Cys Ile Ile Ile Glu Phe Ile Ala Ala Asp Phe
20 25 30

Tyr Asn Asp Ser Cys Cys His Val Ser Leu Asn Asn Xaa
35 40 45

<210> 221
<211> 45
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (45)
<223> Xaa equals stop translation

<400> 221
Met Ile Leu Phe Asp Leu Thr Phe Phe Leu Phe Ala Pro Arg Ile Leu
1 5 10 15

Ala Ser Gly Ala Cys Ser Cys Ser Ile Tyr Pro Lys Ile Thr Leu Pro
20 25 30

Thr Lys Tyr Phe Ala Phe Ile Ile Xaa Thr Ser Phe Xaa
35 40 45

<210> 222
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)

<223> Xaa equals stop translation

<400> 222
Met Asp Gly Leu Ile Met Cys Leu Ile Ile Phe Gln Ile Val Asn Phe
1 5 10 15

Trp Leu Pro Cys Ile Ile Leu Leu Gly Ile Leu Asn Pro Thr Tyr Lys
20 25 30

Asn Tyr Val Met Val Ser Thr Lys Cys Trp Met Lys Arg Thr Tyr Glu
35 40 45

His Met Ser Xaa
50

<210> 223
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (73)
<223> Xaa equals stop translation

<400> 223
Met Thr Phe Leu Phe Phe Phe Leu Phe Ser Arg Ile Leu Cys Ile Lys
1 5 10 15

Asn Leu Asp Leu Leu Thr Trp Lys Arg Ser Asn Pro Val Ile Ala Lys
20 25 30

His Leu Tyr Cys Arg Gly His Ile Thr Lys Lys Ser Lys Gly Pro Ala
35 40 45

Gln Trp Thr Ile Tyr Phe Ser Asp Val Gln Tyr Lys Ile Ser Leu Pro
50 55 60

Leu Lys Thr Leu Glu Ser Pro Phe Xaa
65 70

<210> 224
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (71)
<223> Xaa equals stop translation

<400> 224
Met Leu Phe Trp Lys Phe Gly Ser Phe Leu Phe Phe Cys Leu Pro Leu
1 5 10 15

Thr Leu Phe Cys Ile Leu Asn Glu Arg Gly Ile Met His Leu Glu Gly
20 25 30

Gly Thr Leu Leu Asn Ser Leu Ser His Val Arg His Tyr Leu Arg Leu
35 40 45

Arg Leu Ser Cys Phe Glu Lys Ile Pro Leu His Arg Ser Ile Phe Ile
50 55 60

Phe Leu Leu Leu Leu Leu Xaa
65 70

<210> 225
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals stop translation

<400> 225
Met Ala Gly Cys Cys Leu Lys Leu Phe Gly Val Leu Ser Leu Cys Phe
1 5 10 15

Leu Cys Gly Leu Ile Ser Ile Glu Arg Val Ile Cys Asn Pro Val Ser
20 25 30

Ala Asp Phe Gln Val Ser Thr Phe Cys Gln Arg His Cys Leu Leu Arg
35 40 45

Ser Lys Val Met Phe Pro Ile Arg Gly Xaa
50 55

<210> 226
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals stop translation

<400> 226
Met Arg Ile Ser Arg Cys Asn Ile Ser Leu Glu Ile Val Ser Pro Ser
1 5 10 15

Ile Leu Leu Thr Phe Leu Asp Leu Ile Ile Leu Leu Trp Ala Leu Ala
20 25 30

Ser Cys Tyr Arg Arg Phe Thr Ser Phe Pro Ala Leu Asn Leu Pro Asp
35 40 45

Val Asn Ser Thr Leu His Tyr Leu Gln Gln Xaa
50 55

<210> 227
<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals stop translation

<400> 227
Met Val Ala Pro Leu His Leu Phe Ile Pro Phe Ser Trp Leu Val Arg
1 5 10 15

Thr Ile Gly Gln Leu Leu Ser Pro Val Gly Lys Ala Leu Ser His Arg
20 25 30

Ser Asn Gln Met Met Pro Arg Ser Trp Gly Xaa
35 40

<210> 228
<211> 41
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals stop translation

<400> 228
Met Arg Thr Ser Leu Phe Phe Phe Phe Phe Lys Asn Ile Leu Val Leu
1 5 10 15

Cys Gly Thr Leu Leu Ile Ser Arg Ser Ser His Ser Gln Ser Ala Pro
20 25 30

Arg Gly Cys Trp Trp Pro His Lys Xaa
35 40

<210> 229
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals stop translation

<400> 229

135

Met Leu Trp Lys Tyr Phe Leu Ser Leu Phe Leu Pro Trp Tyr Leu Tyr
1 5 10 15

Cys Phe Phe Asn Asn Asn Ile Met Phe Tyr Ser Leu His Ser Val Pro
20 25 30

Met Phe Ile Gln Pro Phe Leu Leu Trp Xaa
35 40

<210> 230
<211> 165
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (165)
<223> Xaa equals stop translation

<400> 230
Met Ser Thr Arg Arg Leu Gly Val Ala Val Ala Val Leu Gly Gly Phe
1 5 10 15

Leu Tyr Ala Val Gly Gly Ser Asp Gly Thr Ser Pro Leu Asn Thr Val
20 25 30

Glu Arg Tyr Asn Pro Gln Glu Asn Arg Trp His Thr Ile Ala Pro Met
35 40 45

Gly Thr Arg Arg Lys His Leu Gly Cys Ala Val Tyr Gln Asp Met Ile
50 55 60

Tyr Ala Val Gly Gly Arg Asp Asp Thr Thr Glu Leu Ser Ser Ala Glu
65 70 75 80

Arg Tyr Asn Pro Arg Thr Asn Gln Trp Ser Pro Val Val Ala Met Thr
85 90 95

Ser Arg Arg Ser Gly Val Gly Leu Ala Val Val Asn Gly Gln Leu Met
100 105 110

Ala Val Gly Gly Phe Asp Gly Thr Thr Tyr Leu Lys Thr Ile Glu Val
115 120 125

Phe Asp Pro Asp Ala Asn Thr Trp Arg Leu Tyr Gly Gly Met Asn Tyr
130 135 140

Arg Arg Leu Gly Gly Gly Val Gly Val Ile Lys Met Thr His Cys Glu
145 150 155 160

Ser His Ile Trp Xaa
165

<210> 231
<211> 52

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals stop translation

<400> 231
Met Ala Cys Leu Ile Arg Phe Pro Ala Ile Gly Ser Leu Pro Tyr Ser
1 5 10 15

Thr Trp Pro Phe Phe Phe Phe Ile Phe Leu Phe Phe Ser Cys Leu Thr
20 25 30

Phe Ile Pro Phe Ser Pro Leu Ser Ser Phe Cys Glu Pro Tyr Pro Arg
35 40 45

Lys Glu Pro Xaa
50

<210> 232
<211> 130
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (130)
<223> Xaa equals stop translation

<400> 232
Met Phe Leu Leu Asn Phe Arg Tyr Ile Met Arg Phe Phe Phe Trp Pro
1 5 10 15

Met Leu Gln Ala Lys Leu Met Ser Phe His Phe Leu Lys Pro Ile Ile
20 25 30

Phe Met Asn Ser Leu Ile Leu Cys Leu Lys Gln Ser Cys Ser Cys Glu
35 40 45

Val Glu Ile Ser Leu Leu Pro Leu Ser Gln Gln Thr His Arg Thr Asp
50 55 60

Leu Gly Phe Ser His Ser Gly Ser Gln Asn Glu Pro Phe Leu Asn Leu
65 70 75 80

Asp Lys Arg Ala Ala Glu Ala His Cys Ala Val Met Val Leu Cys Leu
85 90 95

Leu Gly Arg Asp Leu Lys Ala Arg Arg Ser Arg Glu Gly Pro Ala Leu
100 105 110

Cys Ser Ser Gln Val Val Ile Cys Ile Leu Lys Leu Ala Arg Lys Arg
115 120 125

Phe Xaa
130

<210> 233
<211> 55
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (55)
<223> Xaa equals stop translation

<400> 233
Met Glu Phe Lys Leu Val Arg Lys Ile Gln Ile Ala Ile Leu Ile Phe
1 5 10 15

Tyr Leu Tyr Leu Val Ala Val Ala Phe Lys Asn Lys Phe Ser Tyr Lys
20 25 30

Ser Phe Gln Phe Phe Gly Leu Glu Ser Ile Phe Gln Asn Lys Lys Leu
35 40 45

Lys Lys Glu Tyr Leu Met Xaa
50 55

<210> 234
<211> 363
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (307)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (363)
<223> Xaa equals stop translation

<400> 234
Met Arg Thr Leu Phe Asn Leu Leu Trp Leu Ala Leu Ala Cys Ser Pro
1 5 10 15

Val His Thr Thr Leu Ser Lys Ser Asp Ala Lys Lys Ala Ala Ser Lys
20 25 30

Thr Leu Leu Glu Lys Ser Gln Phe Ser Asp Lys Pro Val Gln Asp Arg
35 40 45

Gly Leu Val Val Thr Asp Leu Lys Ala Glu Ser Val Val Leu Glu His
50 55 60

Arg Ser Tyr Cys Ser Ala Lys Ala Arg Asp Arg His Phe Ala Gly Asp

65 70 75 80

Val Leu Gly Tyr Val Thr Pro Trp Asn Ser His Gly Tyr Asp Val Thr
85 90 95

Lys Val Phe Gly Ser Lys Phe Thr Gln Ile Ser Pro Val Trp Leu Gln
100 105 110

Leu Lys Arg Arg Gly Arg Glu Met Phe Glu Val Thr Gly Leu His Asp
115 120 125

Val Asp Gln Gly Trp Met Arg Ala Val Arg Lys His Ala Lys Gly Leu
130 135 140

His Ile Val Pro Arg Leu Leu Phe Glu Asp Trp Thr Tyr Asp Asp Phe
145 150 155 160

Arg Asn Val Leu Asp Ser Glu Asp Glu Ile Glu Glu Leu Ser Lys Thr
165 170 175

Val Val Gln Val Ala Lys Asn Gln His Phe Asp Gly Phe Val Val Glu
180 185 190

Val Trp Asn Gln Leu Leu Ser Gln Lys Arg Val Thr Asp Gln Leu Gly
195 200 205

Met Phe Thr His Lys Glu Phe Glu Gln Leu Ala Pro Val Leu Asp Gly
210 215 220

Phe Ser Leu Met Thr Tyr Asp Tyr Ser Thr Ala His Gln Pro Gly Pro
225 230 235 240

Asn Ala Pro Leu Ser Trp Val Arg Ala Cys Val Gln Val Leu Asp Pro
245 250 255

Lys Ser Lys Trp Arg Ser Lys Ile Leu Leu Gly Leu Asn Phe Tyr Gly
260 265 270

Met Asp Tyr Ala Thr Ser Lys Asp Ala Arg Glu Pro Val Val Gly Ala
275 280 285

Arg Tyr Ile Gln Thr Leu Lys Asp His Arg Pro Arg Met Val Trp Asp
290 295 300

Ser Gln Xaa Ser Glu His Phe Phe Glu Tyr Lys Lys Ser Arg Ser Gly
305 310 315 320

Arg His Val Val Phe Tyr Pro Thr Leu Lys Ser Leu Gln Val Arg Leu
325 330 335

Glu Leu Ala Arg Glu Leu Gly Val Gly Val Ser Ile Trp Glu Leu Gly
340 345 350

Gln Gly Leu Asp Tyr Phe Tyr Asp Leu Leu Xaa
355 360

<210> 235
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> Xaa equals stop translation

<400> 235
Met Cys Met Cys Val Leu Leu Cys Val Phe Leu Ile Cys Lys Tyr Ser
1 5 10 15

Lys Ser Phe Leu Ile Leu Arg Leu Lys Phe Ser Cys Xaa
20 25

<210> 236
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (67)
<223> Xaa equals stop translation

<400> 236
Met Gly Asn Ala Cys Ile Pro Leu Lys Arg Ile Ala Tyr Phe Leu Cys
1 5 10 15

Leu Leu Ser Ala Leu Leu Leu Thr Glu Gly Lys Lys Pro Ala Asn Gln
20 25 30

Asn Ala Leu Pro Cys Val Leu Val Pro Lys Ile Met Leu Tyr Val Arg
35 40 45

Met Pro Asp Pro Phe His Ala Pro Phe Leu Leu Met Leu Ser His Tyr
50 55 60

Pro Leu Xaa
65

<210> 237
<211> 114
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (114)
<223> Xaa equals stop translation

<400> 237
Met Ile Leu Ser Leu Leu Phe Ser Leu Gly Gly Pro Leu Gly Trp Gly

140

1 5 10 15

Leu Leu Gly Ala Trp Ala Gln Ala Ser Ser Thr Ser Leu Ser Asp Leu
20 25 30

Gln Ser Ser Arg Thr Pro Gly Val Trp Lys Ala Glu Ala Glu Asp Thr
35 40 45

Ser Lys Asp Pro Val Gly Arg Asn Trp Cys Pro Tyr Pro Met Ser Lys
50 55 60

Leu Val Thr Leu Leu Ala Leu Cys Lys Thr Glu Lys Phe Leu Ile His
65 70 75 80

Ser Gln Gln Pro Cys Pro Gln Glu Leu Gln Thr Ala Arg Lys Ser Lys
85 90 95

Ser Cys Thr Ala Trp Pro Thr Ser Gln Cys Thr Arg Ser Ser Arg Arg
100 105 110

Cys Xaa

<210> 238
<211> 106
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (106)
<223> Xaa equals stop translation

<400> 238
Met Ala Ile His Lys Ala Leu Val Met Cys Leu Gly Leu Pro Leu Phe
1 5 10 15

Leu Phe Pro Gly Ala Trp Ala Gln Gly His Val Pro Pro Gly Cys Ser
20 25 30

Gln Gly Leu Asn Pro Leu Tyr Tyr Asn Leu Cys Asp Arg Ser Gly Ala
35 40 45

Trp Gly Ile Val Leu Glu Ala Val Ala Gly Ala Gly Ile Val Thr Thr
50 55 60

Phe Val Leu Thr Ile Ile Leu Val Ala Ser Leu Pro Phe Val Gln Asp
65 70 75 80

Thr Lys Lys Arg Ser Leu Leu Gly Thr Gln Leu Arg Gly Arg Cys His
85 90 95

His Thr Ala Gly Thr Met Gly Ser Cys Xaa
100 105

<210> 239
<211> 15
<212> PRT
<213> Homo sapiens

<400> 239
Gly Leu Gly Pro Ala Gln Val Ala Leu Ser Leu Gln Gly Pro Ala
1 5 10 15

<210> 240
<211> 82
<212> PRT
<213> Homo sapiens

<400> 240
Ser Ser Trp Met Ala Gly Thr Gln Pro Arg Thr Ser Trp Trp Glu Met
1 5 10 15

Ser Ser Ala Lys Pro Cys Pro Thr Gly Thr Leu Arg Ser Asn Thr Ser
20 25 30

Ser His Pro Gln Cys Thr Gly Pro Pro Thr Thr His Pro Met Leu Val
35 40 45

Gly Glu Asp Met Ser Cys Pro Glu Pro Gln Cys Gly Ala Ser Arg Leu
50 55 60

Ser Trp Lys Met Leu Asn Ser Ser Pro Leu Met Met Ser Leu Trp Val
65 70 75 80

Cys Ala

<210> 241
<211> 23
<212> PRT
<213> Homo sapiens

<400> 241
Gln Pro Arg Thr Ser Trp Trp Glu Met Ser Ser Ala Lys Pro Cys Pro
1 5 10 15

Thr Gly Thr Leu Arg Ser Asn
20

<210> 242
<211> 23
<212> PRT
<213> Homo sapiens

<400> 242
Met Ser Cys Pro Glu Pro Gln Cys Gly Ala Ser Arg Leu Ser Trp Lys
1 5 10 15

Met Leu Asn Ser Ser Pro Leu
20

<210> 243
<211> 98
<212> PRT
<213> Homo sapiens

<400> 243
Trp Val Ala Leu Tyr Ile Glu Gly Gly Met Lys Tyr Leu Thr Leu Val
1 5 10 15

Phe Leu Leu Gly Arg Ala Trp Arg Met Thr Ser Pro Thr Arg Arg Ser
20 25 30

Trp Ala Gly Ser Gln Pro Ser Arg Asn Ser Asn Thr Leu Gly Thr Trp
35 40 45

Thr Lys Thr Ser Ser Ser Pro Phe Ser Met Lys Trp Ala Trp Gly Gln
50 55 60

Ala Ala Thr Thr Gln Arg Cys Arg Cys Ser Ser Leu Ser Val Arg Leu
65 70 75 80

Lys Lys Ser Ser Val Lys Ser His Trp Arg Met Ser Ser Asn Ser Leu
85 90 95

Leu Ser

<210> 244
<211> 20
<212> PRT
<213> Homo sapiens

<400> 244
Gly Gly Met Lys Tyr Leu Thr Leu Val Phe Leu Leu Gly Arg Ala Trp
1 5 10 15

Arg Met Thr Ser
20

<210> 245
<211> 25
<212> PRT
<213> Homo sapiens

<400> 245
Ser Gln Pro Ser Arg Asn Ser Asn Thr Leu Gly Thr Trp Thr Lys Thr
1 5 10 15

Ser Ser Ser Pro Phe Ser Met Lys Trp
20 25

<210> 246
<211> 26
<212> PRT
<213> Homo sapiens

<400> 246
Thr Thr Gln Arg Cys Arg Cys Ser Ser Leu Ser Val Arg Leu Lys Lys
1 5 10 15

Ser Ser Val Lys Ser His Trp Arg Met Ser
20 25

<210> 247
<211> 223
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (121)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (130)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 247

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Ala Ser Thr Leu Ala Gln Thr Thr Gly Thr Cys Lys Xaa Xaa Xaa Ser
  1               5                  10                  15

Ser Arg Arg Ala Arg Ser Arg Thr Gln Arg Xaa Phe Gln Leu Arg Pro
             20                  25                  30

Asp Lys Arg Ser Ala Pro Ser Leu Leu Gln Phe Ile Gln Ala Gln Glu
         35                  40                  45

Glu Leu Ser Lys Glu Asn Thr Gly Arg Gln Leu Ala Ala Arg Glu Ala
     50                  55                  60

Val Leu Ala Leu Glu Gly Ser Thr Gln Leu Thr Gly Pro Val Thr Gln
 65                  70                  75                  80

Val Ala Ala Ser Lys Thr His Cys Ser Gly Met Ala Leu Thr Ala Ser
                 85                  90                  95

Pro Val Pro Val Leu Gly Ala Ala Pro Ala Lys Xaa Pro Thr Gln Asn
            100                 105                 110

Xaa Pro Gly Gln Xaa Gly Arg Ala Xaa Xaa Lys Val Xaa Thr Ser Trp
        115                 120                 125

Xaa Xaa Val Ala Thr Lys Val Leu His Gly Leu Glu Val Ser Thr His
    130                 135                 140

Leu Gly Lys Arg Lys Leu Ser Gly Arg Ser Trp Leu Pro Gly Pro Ala
145                 150                 155                 160

Leu His Ala Thr Pro Ser Gln Ser His Thr Gln Thr Gly Ser Gln Ile
                165                 170                 175

Val His Pro Pro Gln Gly Glu Val Arg Glu Val Gly Arg Gly Arg Gly
```

145

180 185 190

Gln Pro Pro Ala Gln Pro Val His Ala His Pro Ser Gln Gln His Pro
195 200 205

Ser Pro Ala His Leu Ala Gly Leu Ser Leu Trp Thr Gly Thr Ala
210 215 220

<210> 248
<211> 140
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 248
Ala Met Leu Glu Thr Trp Arg Pro Gly Pro Ser Xaa Gly Glu Leu Ala
1 5 10 15

Thr Asn Ser Gly Gln Arg Ala Ser Gln Asp Ser Gln His Ser Pro Pro
20 25 30

His Val Arg Ala His Leu Leu Ile Ser Pro Leu Pro Ala Phe Pro Ser
35 40 45

Met Gly Gly Pro Ala Gly Arg Ser Ala Pro Xaa Xaa Leu Thr Glu Thr
50 55 60

Lys Ser Glu Leu Gln Arg Leu Arg Arg Arg Gln Ala Arg Ala Ser Xaa
65 70 75 80

Ser Xaa Pro Ala Gly Glu Pro Gly Ala Gly His Ser Asp Ser Phe Asn
85 90 95

```
Cys Val Pro Thr Asn Gly Gln Pro Leu Arg Ser Cys Ser Leu Ser Lys
            100                 105                 110

Leu Arg Arg Ser Phe Leu Lys Arg Thr Gln Gly Asp Ser Trp Leu Pro
        115                 120                 125

Glu Lys Gln Ser Trp Leu Trp Lys Ala Pro Pro Ser
    130                 135                 140
```

<210> 249
<211> 122
<212> PRT
<213> Homo sapiens

<400> 249

```
Ser His Gln Ser His Leu Ile Asn Pro Ala Ser Ser Ala Lys Gly Ser
  1               5                  10                  15

Trp Ala Gln Leu Lys Ala Gln Pro Pro Ala His Val Leu Gly Gly Thr
             20                  25                  30

Gly Gln Glu Gly Pro Pro Pro Thr Ala Asp Gln Pro Glu Ser Pro Gly
         35                  40                  45

Trp Asp Pro Ser Ser Phe Thr Asn Gly Ser Ser Gly Pro Arg Ala Leu
     50                  55                  60

Pro Thr Ser Val His Pro Thr Leu Gln Gln Gly Ala Pro Cys Arg Arg
 65                  70                  75                  80

Asn Trp Ala Pro Cys Arg Gly Leu Val Glu Thr Arg Met Leu Arg Arg
                 85                  90                  95

Gln Leu Pro His Gly Thr Ser Lys Arg Asp Leu Gly Trp Ala Ser Leu
            100                 105                 110

Gln Arg Gly Ser Pro Gln Glu Thr Pro Gln
        115                 120
```

<210> 250
<211> 35
<212> PRT
<213> Homo sapiens

<400> 250

```
Arg Pro Asp Lys Arg Ser Ala Pro Ser Leu Leu Gln Phe Ile Gln Ala
  1               5                  10                  15

Gln Glu Glu Leu Ser Lys Glu Asn Thr Gly Arg Gln Leu Ala Ala Arg
             20                  25                  30

Glu Ala Val
         35
```

<210> 251
<211> 33
<212> PRT
<213> Homo sapiens

<400> 251
Ala Thr Pro Ser Gln Ser His Thr Gln Thr Gly Ser Gln Ile Val His
1 5 10 15

Pro Pro Gln Gly Glu Val Arg Glu Val Gly Arg Gly Arg Gly Gln Pro
20 25 30

Pro

<210> 252
<211> 29
<212> PRT
<213> Homo sapiens

<400> 252
Gln Asp Ser Gln His Ser Pro Pro His Val Arg Ala His Leu Leu Ile
1 5 10 15

Ser Pro Leu Pro Ala Phe Pro Ser Met Gly Gly Pro Ala
20 25

<210> 253
<211> 28
<212> PRT
<213> Homo sapiens

<400> 253
Asp Ser Phe Asn Cys Val Pro Thr Asn Gly Gln Pro Leu Arg Ser Cys
1 5 10 15

Ser Leu Ser Lys Leu Arg Arg Ser Phe Leu Lys Arg
20 25

<210> 254
<211> 25
<212> PRT
<213> Homo sapiens

<400> 254
Lys Gly Ser Trp Ala Gln Leu Lys Ala Gln Pro Pro Ala His Val Leu
1 5 10 15

Gly Gly Thr Gly Gln Glu Gly Pro Pro
20 25

<210> 255

<211> 26
<212> PRT
<213> Homo sapiens

<400> 255
Ala Pro Ser Leu Leu Gln Phe Ile Gln Ala Gln Glu Glu Leu Ser Lys
1 5 10 15

Glu Asn Thr Gly Arg Gln Leu Ala Ala Arg
20 25

<210> 256
<211> 6
<212> PRT
<213> Homo sapiens

<400> 256
Lys Pro Ser His Gln Pro
1 5

<210> 257
<211> 21
<212> PRT
<213> Homo sapiens

<400> 257
Cys Ser Tyr Arg Pro Gln Phe Pro Val Asp Pro Arg Val Arg Ala Thr
1 5 10 15

Cys Ile Val Phe Asn
20

<210> 258
<211> 128
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 258
Gly Thr Glu Asn Leu Leu Ala Pro Glu Arg Thr Ile Leu Ser Arg Ala

149

```
  1               5                  10                  15

Gln Met Gly Lys Cys Met Ala Thr Pro Ala Pro Cys Val Arg Ser Ser
            20                  25                  30

Ser Lys Gln Lys Lys Lys Lys Arg Lys Arg Arg Lys Val Xaa Gln Glu
        35                  40                  45

Thr Lys Asp Asn Leu Arg Val Gln Leu Pro Leu Xaa Ser Cys Val Val
    50                  55                  60

Asn Xaa Ala Asn Pro Gly Lys Thr Asp Gly Phe Phe Ala Pro Glu Arg
65                  70                  75                  80

Met Thr Pro Ser Arg Ala Gln Met Glu Lys Cys Met Ala Thr Pro Ala
                85                  90                  95

Pro Cys Val Arg Pro Ser Phe Asn Lys Lys Lys Glu Gln Glu Gln Arg
            100                 105                 110

Leu Lys Glu Lys Leu Gln Arg Lys Ser Ala Val Asn Phe Gly Thr Lys
        115                 120                 125
```

<210> 259
<211> 26
<212> PRT
<213> Homo sapiens

<400> 259
```
Leu Leu Ala Pro Glu Arg Thr Ile Leu Ser Arg Ala Gln Met Gly Lys
  1               5                  10                  15

Cys Met Ala Thr Pro Ala Pro Cys Val Arg
            20                  25
```

<210> 260
<211> 24
<212> PRT
<213> Homo sapiens

<400> 260
```
Pro Gly Lys Thr Asp Gly Phe Phe Ala Pro Glu Arg Met Thr Pro Ser
  1               5                  10                  15

Arg Ala Gln Met Glu Lys Cys Met
            20
```

<210> 261
<211> 17
<212> PRT
<213> Homo sapiens

<400> 261
Glu Gln Arg Leu Lys Glu Lys Leu Gln Arg Lys Ser Ala Val Asn Phe
1 5 10 15

Gly

<210> 262
<211> 186
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 262
Lys Thr Leu Leu Glu Asn Phe Ser Thr Gln Gly Thr Phe Val Ala Met
1 5 10 15

His Pro Ala Val Arg Ala Thr Asp Trp Ile Thr Leu Pro Cys Thr Lys
20 25 30

Lys Pro Ser Ile Ser His Leu Phe Phe Xaa Phe Leu Ala Lys Ile Leu
35 40 45

Phe Ser Ile Ser Ser Asn Ser Ser Phe Thr Leu Ser Leu Gly Ile Phe
50 55 60

Ser Phe Phe Xaa Xaa Gln Leu Ser Thr His Cys Thr Leu Ile Ala Met
65 70 75 80

Arg Leu Pro Ile Arg Thr Lys Asn Arg Ile Ile Phe Pro Cys Ala Ser
85 90 95

Lys Ser Ser Ile Ser Asn Lys Gly Pro Lys Ser Thr Ala Tyr Ile Leu
100 105 110

Leu Trp Ile Thr Ala Leu Thr Phe Pro Phe Thr Phe Tyr Thr Asn Leu
115 120 125

Gly Pro Gly Phe Arg Ile Leu Ser Thr Gln Cys Thr Ser Val Val Ile
130 135 140

151

Cys Phe Pro Ile Cys Ala Thr Asn Ser Phe Ile Ile Ile Arg Thr Asp
145 150 155 160

Lys Ile Pro Ile Ser Phe Ser Phe Phe Lys Ile Ile Thr Ile Gln Leu
165 170 175

Cys Trp Gly Ser Ser Leu Gly Ser Ser Cys
180 185

<210> 263
<211> 22
<212> PRT
<213> Homo sapiens

<400> 263
Met His Pro Ala Val Arg Ala Thr Asp Trp Ile Thr Leu Pro Cys Thr
1 5 10 15

Lys Lys Pro Ser Ile Ser
20

<210> 264
<211> 17
<212> PRT
<213> Homo sapiens

<400> 264
Leu Ile Ala Met Arg Leu Pro Ile Arg Thr Lys Asn Arg Ile Ile Phe
1 5 10 15

Pro

<210> 265
<211> 26
<212> PRT
<213> Homo sapiens

<400> 265
Ser Ser Ile Ser Asn Lys Gly Pro Lys Ser Thr Ala Tyr Ile Leu Leu
1 5 10 15

Trp Ile Thr Ala Leu Thr Phe Pro Phe Thr
20 25

<210> 266
<211> 23
<212> PRT
<213> Homo sapiens

<400> 266
Ile Ile Ile Arg Thr Asp Lys Ile Pro Ile Ser Phe Ser Phe Phe Lys
1 5 10 15

Ile Ile Thr Ile Gln Leu Cys
20

<210> 267
<211> 165
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (153)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 267
Asn Asp Gly Gln Cys Leu Ala Tyr Asn Thr Thr His Tyr Arg Glu Arg
1 5 10 15

Ala Met Thr Ser His Ala Arg Val Ser Leu Gly Pro Ser Arg Asp Pro
20 25 30

Leu Glu Arg Pro Pro Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe
35 40 45

Lys Phe Glu His Thr Gly Thr His Gly Thr Leu Val Ser Met His Phe
50 55 60

Ala Ile Trp Ala Thr Asp Arg Ile Met Leu Pro Gly Ala Tyr Lys Cys
65 70 75 80

Ser Ile Pro His Leu Val Pro Lys Phe Thr Ala Asp Phe Leu Cys Ser
85 90 95

Phe Ser Phe Ser Leu Cys Ser Cys Ser Phe Phe Leu Leu Lys Glu Gly
100 105 110

Leu Thr His Gly Ala Gly Val Ala Met His Phe Ser Ile Trp Ala Leu
115 120 125

Asp Gly Val Ile Leu Ser Gly Ala Lys Lys Pro Ser Val Phe Pro Gly
130 135 140

Phe Ala Xaa Phe Thr Thr Gln Leu Xaa Lys Gly Ser Cys Thr Leu Arg
145 150 155 160

Leu Ser Phe Val Ser
165

<210> 268
<211> 22

<212> PRT
<213> Homo sapiens

<400> 268
Cys Leu Ala Tyr Asn Thr Thr His Tyr Arg Glu Arg Ala Met Thr Ser
1 5 10 15

His Ala Arg Val Ser Leu
20

<210> 269
<211> 31
<212> PRT
<213> Homo sapiens

<400> 269
Gly Thr Leu Val Ser Met His Phe Ala Ile Trp Ala Thr Asp Arg Ile
1 5 10 15

Met Leu Pro Gly Ala Tyr Lys Cys Ser Ile Pro His Leu Val Pro
20 25 30

<210> 270
<211> 24
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 270
Gly Val Ile Leu Ser Gly Ala Lys Lys Pro Ser Val Phe Pro Gly Phe
1 5 10 15

Ala Xaa Phe Thr Thr Gln Leu Xaa
20

<210> 271
<211> 141
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 271
Lys Lys Ala Ser His Met Glu Gln Val Leu Pro Cys Ile Phe Pro Ser
1 5 10 15

Gly Pro Trp Met Gly Ser Phe Ser Leu Xaa Gln Lys Ser Arg Pro Phe
20 25 30

Phe Leu Asp Leu Arg Xaa Ser Leu His Asn Ser Xaa Lys Glu Ala Val
35 40 45

Leu Leu Asp Cys Leu Leu Phe Leu Xaa Xaa Pro Ser Phe Phe Phe Phe
50 55 60

Ser Ser Ser Ser Ala Trp Lys Lys Thr Ser His Met Glu Gln Val Leu
65 70 75 80

Pro Cys Thr Phe Pro Ser Gly Pro Trp Ile Gly Leu Phe Ser Leu Val
85 90 95

Gln Ala Ser Phe Pro Phe Leu Thr Ser Phe Arg Tyr Ser Leu Gln Ser
100 105 110

Ser Ala Tyr Glu Val Ala Phe Pro Asp Ser Leu Leu Phe Leu Ala Arg
115 120 125

Ala Ser Ala Phe Phe Phe Ser Ser Phe Ser Ala Trp Lys
130 135 140

<210> 272
<211> 28
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 272
Cys Ile Phe Pro Ser Gly Pro Trp Met Gly Ser Phe Ser Leu Xaa Gln
1 5 10 15

Lys Ser Arg Pro Phe Phe Leu Asp Leu Arg Xaa Ser
20 25

<210> 273
<211> 28
<212> PRT
<213> Homo sapiens

<400> 273
Trp Ile Gly Leu Phe Ser Leu Val Gln Ala Ser Phe Pro Phe Leu Thr
1 5 10 15

Ser Phe Arg Tyr Ser Leu Gln Ser Ser Ala Tyr Glu
20 25

<210> 274
<211> 79
<212> PRT
<213> Homo sapiens

<400> 274
Asn Ser Ala Val Asn Ile Lys Ile Arg Gln Arg Met Glu Tyr Phe Ser
1 5 10 15

Val Pro Glu Lys Met Thr Leu Phe Val Val Gln Met Gly Lys Cys Met
20 25 30

Ala Thr Cys Val Pro Cys Val Lys Pro Thr Ser Lys Gln Lys Met Lys
35 40 45

Lys Arg Lys Arg Leu Lys His Glu Leu Glu Thr Lys Glu Asn Leu Glu
50 55 60

Lys Gln Pro His Met Gln Ser Phe Ala Val Asn Ile Glu Ser Leu
65 70 75

<210> 275
<211> 23
<212> PRT
<213> Homo sapiens

<400> 275
Ile Lys Ile Arg Gln Arg Met Glu Tyr Phe Ser Val Pro Glu Lys Met

1 5 10 15

Thr Leu Phe Val Val Gln Met
20

<210> 276
<211> 25
<212> PRT
<213> Homo sapiens

<400> 276
Val Lys Pro Thr Ser Lys Gln Lys Met Lys Lys Arg Lys Arg Leu Lys
1 5 10 15

His Glu Leu Glu Thr Lys Glu Asn Leu
20 25

<210> 277
<211> 63
<212> PRT
<213> Homo sapiens

<400> 277
Pro Arg Val Arg Gly Thr Val Val Arg Leu Arg Gln His Arg Pro Ser
1 5 10 15

Ala Tyr Ile Leu Val Ser Thr Val Leu Thr Leu Met Val Pro Trp His
20 25 30

Ser Leu Asp Pro Asp Ser Ala Leu Ala Asp Ala Phe Tyr Gln Arg Gly
35 40 45

Tyr Arg Trp Ala Gly Phe Ile Val Ala Ala Gly Ser Ile Cys Ala
50 55 60

<210> 278
<211> 25
<212> PRT
<213> Homo sapiens

<400> 278
Thr Val Val Arg Leu Arg Gln His Arg Pro Ser Ala Tyr Ile Leu Val
1 5 10 15

Ser Thr Val Leu Thr Leu Met Val Pro
20 25

<210> 279
<211> 26
<212> PRT
<213> Homo sapiens

<400> 279

Trp His Ser Leu Asp Pro Asp Ser Ala Leu Ala Asp Ala Phe Tyr Gln
1 5 10 15

Arg Gly Tyr Arg Trp Ala Gly Phe Ile Val
20 25

<210> 280
<211> 101
<212> PRT
<213> Homo sapiens

<400> 280
Thr Pro Ser Cys Ser Ala Ser Ser Ser Pro Cys His Ala Leu Ser Met
1 5 10 15

Pro Trp Pro Pro Met Gly Ser Ser Ser Arg Cys Leu Pro Met Cys Thr
20 25 30

Pro Gly His Arg Cys Leu Trp Arg Ala Pro Trp Arg Ser Gly Ser Ser
35 40 45

Arg Pro Ser Trp His Cys Cys Trp Thr Trp Ser Arg Trp Phe Ser Ser
50 55 60

Cys Pro Leu Ala His Ser Trp Pro Thr His Ser Trp Pro Pro Val Ser
65 70 75 80

Leu Cys Cys Ala Ser Arg Ser Leu Pro Arg Pro Ala Pro Gln Ala Gln
85 90 95

Pro Ala Leu Ala Pro
100

<210> 281
<211> 24
<212> PRT
<213> Homo sapiens

<400> 281
Leu Ser Met Pro Trp Pro Pro Met Gly Ser Ser Ser Arg Cys Leu Pro
1 5 10 15

Met Cys Thr Pro Gly His Arg Cys
20

<210> 282
<211> 27
<212> PRT
<213> Homo sapiens

<400> 282
Ala Pro Trp Arg Ser Gly Ser Ser Arg Pro Ser Trp His Cys Cys Trp
1 5 10 15

Thr Trp Ser Arg Trp Phe Ser Ser Cys Pro Leu
20 25

<210> 283
<211> 22
<212> PRT
<213> Homo sapiens

<400> 283
Thr His Ser Trp Pro Pro Val Ser Leu Cys Cys Ala Ser Arg Ser Leu
1 5 10 15

Pro Arg Pro Ala Pro Gln
20

<210> 284
<211> 60
<212> PRT
<213> Homo sapiens

<400> 284
Ala Tyr Ile Leu Val Ser Thr Val Leu Thr Leu Met Val Pro Trp His
1 5 10 15

Ser Leu Asp Pro Asp Ser Ala Leu Ala Asp Ala Phe Tyr Gln Arg Gly
20 25 30

Tyr Arg Trp Ala Gly Phe Ile Val Ala Ala Gly Ser Ile Cys Ala Met
35 40 45

Asn Thr Val Leu Leu Ser Leu Leu Phe Ser Leu Pro
50 55 60

<210> 285
<211> 31
<212> PRT
<213> Homo sapiens

<400> 285
Pro Trp His Ser Leu Asp Pro Asp Ser Ala Leu Ala Asp Ala Phe Tyr
1 5 10 15

Gln Arg Gly Tyr Arg Trp Ala Gly Phe Ile Val Ala Ala Gly Ser
20 25 30

<210> 286
<211> 27
<212> PRT
<213> Homo sapiens

<400> 286
Arg Ile Val Tyr Ala Met Ala Ala Asp Gly Leu Phe Phe Gln Val Phe
1 5 10 15

Ala His Val His Pro Arg Thr Gln Val Pro Val
20 25

<210> 287
<211> 16
<212> PRT
<213> Homo sapiens

<400> 287
Asp Leu Glu Ser Leu Val Gln Phe Leu Ser Leu Gly Thr Leu Leu Ala
1 5 10 15

<210> 288
<211> 15
<212> PRT
<213> Homo sapiens

<400> 288
Tyr Thr Phe Val Ala Thr Ser Ile Ile Val Leu Arg Phe Gln Lys
1 5 10 15

<210> 289
<211> 31
<212> PRT
<213> Homo sapiens

<400> 289
Leu Thr Lys Gln Gln Ser Ser Phe Ser Asp His Leu Gln Leu Val Gly
1 5 10 15

Thr Val His Ala Ser Val Pro Glu Pro Gly Glu Leu Lys Pro Ala
20 25 30

<210> 290
<211> 50
<212> PRT
<213> Homo sapiens

<400> 290
Leu Arg Pro Tyr Leu Gly Phe Leu Asp Gly Tyr Ser Pro Gly Ala Val
1 5 10 15

Val Thr Trp Ala Leu Gly Val Met Leu Ala Ser Ala Ile Thr Ile Gly
20 25 30

Cys Val Leu Val Phe Gly Asn Ser Thr Leu His Leu Pro His Trp Gly
35 40 45

Tyr Ile

50

<210> 291
<211> 27
<212> PRT
<213> Homo sapiens

<400> 291
Pro Gly Ala Val Val Thr Trp Ala Leu Gly Val Met Leu Ala Ser Ala
1 5 10 15

Ile Thr Ile Gly Cys Val Leu Val Phe Gly Asn
20 25

<210> 292
<211> 53
<212> PRT
<213> Homo sapiens

<400> 292
Gly Ala His Gln Gln Gln Tyr Arg Glu Asp Leu Phe Gln Ile Pro Met
1 5 10 15

Val Pro Leu Ile Pro Ala Leu Ser Ile Val Leu Asn Ile Cys Leu Met
20 25 30

Leu Lys Leu Ser Tyr Leu Thr Trp Val Arg Phe Ser Ile Trp Leu Leu
35 40 45

Met Gly Leu Ala Val
50

<210> 293
<211> 26
<212> PRT
<213> Homo sapiens

<400> 293
Met Val Pro Leu Ile Pro Ala Leu Ser Ile Val Leu Asn Ile Cys Leu
1 5 10 15

Met Leu Lys Leu Ser Tyr Leu Thr Trp Val
20 25

<210> 294
<211> 29
<212> PRT
<213> Homo sapiens

<400> 294
Tyr Phe Gly Tyr Gly Ile Arg His Ser Lys Glu Asn Gln Arg Glu Leu
1 5 10 15

Pro Gly Leu Asn Ser Thr His Tyr Val Val Phe Pro Arg
20 25

<210> 295
<211> 23
<212> PRT
<213> Homo sapiens

<400> 295
Phe Pro Pro Ser Pro Ala Pro Pro His Ser Leu Pro Leu Arg Ser Trp
1 5 10 15

Leu Trp Ser Arg Gln Met Gly
20

<210> 296
<211> 148
<212> PRT
<213> Homo sapiens

<400> 296
Gly Thr Ser Phe Arg Gly Met Ile Ser Thr Gln Pro Gly Ser Thr Pro
1 5 10 15

Leu Ala Ser Phe Lys Ile Leu Ala Leu Glu Ser Ala Asp Gly His Gly
20 25 30

Gly Cys Ser Ala Gly Asn Asp Ile Gly Pro Tyr Gly Glu Arg Asp Asp
35 40 45

Gln Gln Val Phe Ile Gln Lys Val Val Pro Ser Ala Ser Gln Leu Phe
50 55 60

Val Arg Leu Ser Ser Thr Gly Gln Arg Val Cys Ser Val Arg Ser Val
65 70 75 80

Asp Gly Ser Pro Thr Thr Ala Phe Thr Val Leu Glu Cys Glu Gly Ser
85 90 95

Pro Ala Ala Arg Leu Ser Ala Pro Ala Leu Pro Ala His Trp Pro Gly
100 105 110

Gln Arg Gln Leu Gly His Val Gly Pro Asn His Arg His Gly Arg Pro
115 120 125

Arg Pro Gly Pro Cys Arg Trp Pro Asp Gly Ala Arg Ala Asp Gly Thr
130 135 140

Ala Gly Thr Leu
145

<210> 297
<211> 29
<212> PRT

<213> Homo sapiens

<400> 297
Pro Gly Ser Thr Pro Leu Ala Ser Phe Lys Ile Leu Ala Leu Glu Ser
1 5 10 15

Ala Asp Gly His Gly Gly Cys Ser Ala Gly Asn Asp Ile
20 25

<210> 298
<211> 24
<212> PRT
<213> Homo sapiens

<400> 298
Gly Glu Arg Asp Asp Gln Gln Val Phe Ile Gln Lys Val Val Pro Ser
1 5 10 15

Ala Ser Gln Leu Phe Val Arg Leu
20

<210> 299
<211> 25
<212> PRT
<213> Homo sapiens

<400> 299
Arg Ser Val Asp Gly Ser Pro Thr Thr Ala Phe Thr Val Leu Glu Cys
1 5 10 15

Glu Gly Ser Pro Ala Ala Arg Leu Ser
20 25

<210> 300
<211> 26
<212> PRT
<213> Homo sapiens

<400> 300
Pro Ala Leu Pro Ala His Trp Pro Gly Gln Arg Gln Leu Gly His Val
1 5 10 15

Gly Pro Asn His Arg His Gly Arg Pro Arg
20 25

<210> 301
<211> 168
<212> PRT
<213> Homo sapiens

<400> 301
Pro Phe Ile Pro Arg Arg Pro Trp Pro Glu Pro Gly Val Pro Thr Gly
1 5 10 15

Ile Arg Glu Ala Pro Glu Ser Pro Arg Thr Arg Ala Ser Gln Gly Ile
20 25 30

Met Ala Ala Ala Leu Phe Lys Lys Glu Val Ser Leu Ser Phe Ile Leu
35 40 45

Gly Gly Val Arg Gly Val Pro Arg Pro Leu Glu Gly His Gly Ala Gly
50 55 60

Val Gly Gly Arg Arg Arg Ser Gly Pro Leu Arg Thr Ser Ser Trp Gln
65 70 75 80

Arg Ser Thr Lys Leu Pro Pro Pro Arg Arg Arg Ala Ser Ala Cys Gly
85 90 95

Gly Leu Gly Leu Pro Arg Trp Pro Asp Lys Glu Val Leu Leu Glu Ala
100 105 110

Glu Trp Arg Leu Val Arg Glu Met Arg Gly Glu Gly Leu Gly Arg Gln
115 120 125

Pro His Glu Gly Ala Glu Arg Ser Arg Arg Gly Gln Leu Thr Val Phe
130 135 140

Gln Leu Phe His Gln Leu Leu Leu Arg Gln Ala Thr Cys Arg Gly Leu
145 150 155 160

Ala Glu Ala Val His Gly Gly Gly
165

<210> 302
<211> 32
<212> PRT
<213> Homo sapiens

<400> 302
Pro Gly Val Pro Thr Gly Ile Arg Glu Ala Pro Glu Ser Pro Arg Thr
1 5 10 15

Arg Ala Ser Gln Gly Ile Met Ala Ala Ala Leu Phe Lys Lys Glu Val
20 25 30

<210> 303
<211> 28
<212> PRT
<213> Homo sapiens

<400> 303
Phe Ile Leu Gly Gly Val Arg Gly Val Pro Arg Pro Leu Glu Gly His
1 5 10 15

Gly Ala Gly Val Gly Gly Arg Arg Arg Ser Gly Pro
20 25

<210> 304
<211> 24
<212> PRT
<213> Homo sapiens

<400> 304
Gly Leu Pro Arg Trp Pro Asp Lys Glu Val Leu Leu Glu Ala Glu Trp
1 5 10 15

Arg Leu Val Arg Glu Met Arg Gly
20

<210> 305
<211> 23
<212> PRT
<213> Homo sapiens

<400> 305
Gly Ala Glu Arg Ser Arg Arg Gly Gln Leu Thr Val Phe Gln Leu Phe
1 5 10 15

His Gln Leu Leu Leu Arg Gln
20

<210> 306
<211> 15
<212> PRT
<213> Homo sapiens

<400> 306
His Ala Ser Ala His Ala Ser Ala His Ala Ser Gly Cys Gly Ala
1 5 10 15

<210> 307
<211> 118
<212> PRT
<213> Homo sapiens

<400> 307
Gln Gly Val Gly Val Ala Asp Glu Gly Gly Leu Glu Arg Gln Arg Val
1 5 10 15

Asp Ala Gly Ala Arg Leu Gly His Met Gly Gln Pro Val Ala Phe Ser
20 25 30

Thr Arg Gln Leu His Leu Ala Leu Pro Ala Pro Gly Thr Ala Gly Val
35 40 45

Thr Val Pro His Pro His Ala Arg Glu Gly Val Val Gly Asp Leu Pro
50 55 60

165

Leu Val Pro Asp Ala Glu Asp Pro Thr Val Gly Val Pro Ala Glu Gly
65 70 75 80

Leu Leu Val Leu Gly His Val Val Glu Arg Ala Glu Leu Ile Leu Val
85 90 95

Arg Gly Leu His Gln Ala Glu Ala Leu Ala Arg Glu Ser Glu Glu Met
100 105 110

His Gly Ser Arg His Gly
115

<210> 308
<211> 25
<212> PRT
<213> Homo sapiens

<400> 308
Glu Gly Gly Leu Glu Arg Gln Arg Val Asp Ala Gly Ala Arg Leu Gly
1 5 10 15

His Met Gly Gln Pro Val Ala Phe Ser
20 25

<210> 309
<211> 29
<212> PRT
<213> Homo sapiens

<400> 309
Leu Ala Leu Pro Ala Pro Gly Thr Ala Gly Val Thr Val Pro His Pro
1 5 10 15

His Ala Arg Glu Gly Val Val Gly Asp Leu Pro Leu Val
20 25

<210> 310
<211> 28
<212> PRT
<213> Homo sapiens

<400> 310
Pro Ala Glu Gly Leu Leu Val Leu Gly His Val Val Glu Arg Ala Glu
1 5 10 15

Leu Ile Leu Val Arg Gly Leu His Gln Ala Glu Ala
20 25

<210> 311
<211> 125
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 311
His Leu Phe Lys Phe Phe Tyr Thr Ile Ala Phe Met Gln Trp Phe Thr
1 5 10 15

Glu Phe Met Glu Leu Phe Leu Ser Val Trp Glu Leu Ile Lys Thr Xaa
20 25 30

Asn Leu Cys Phe Val Cys Phe Ser Glu His Lys Pro Gly Gln Leu Val
35 40 45

Pro Ala Gly Pro Thr Ser Gln Leu Leu Cys Arg Ala Leu Gly Arg Val
50 55 60

His Leu Cys Ser Pro Thr Thr Arg Ser Gln Thr Pro Thr Gln Ser Trp
65 70 75 80

Val Thr Pro Gln Leu Leu Trp Arg Leu Gly Ser Gly Arg Leu Val Ala
85 90 95

Gln Val Leu Gln Val Gly Ser Phe Cys Gly Pro Arg Val Gly Asp Ala
100 105 110

Val Leu Gly Glu Gln Thr Phe Gln Pro Phe Asp Leu Leu
115 120 125

<210> 312
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 312
Ala Phe Met Gln Trp Phe Thr Glu Phe Met Glu Leu Phe Leu Ser Val
1 5 10 15

Trp Glu Leu Ile Lys Thr Xaa Asn Leu Cys Phe Val Cys
20 25

<210> 313
<211> 26
<212> PRT
<213> Homo sapiens

<400> 313
Arg Ser Gln Thr Pro Thr Gln Ser Trp Val Thr Pro Gln Leu Leu Trp

1 5 10 15

Arg Leu Gly Ser Gly Arg Leu Val Ala Gln
20 25

<210> 314
<211> 39
<212> PRT
<213> Homo sapiens

<400> 314
Gly Ala Trp Gly Val Glu Val Val Ala Val Gly Ser Lys Ala Gly Cys
1 5 10 15

Leu Val Tyr Gln Leu Cys Asp Leu Lys Gln Ile Thr Phe Phe Phe Arg
20 25 30

Ala Ser Val Cys Leu Ser Val
35

<210> 315
<211> 194
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (187)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 315

```
Pro Ala Ser Leu Gly Ser Ser Trp Gly Gln Lys Leu Arg Gly Gly Thr
  1               5                  10                  15

Arg Lys Ser Phe Gln Glu Leu Ser Pro Ser Ser Ala Pro Pro Ala Cys
             20                  25                  30

Leu Pro Gln Pro Pro Ala Ser Thr Trp Leu Ser Ser Trp Pro Arg Pro
         35                  40                  45

Pro Cys Trp Pro Pro Met Cys Ser Trp Ala Leu Gly Xaa Cys Phe Cys
     50                  55                  60

Pro Ala Thr Gly Gln Trp Leu Pro Thr Ser Cys Cys Leu Trp Trp Cys
 65                  70                  75                  80

Pro Asp Ala Gly Gly Arg Gln Lys His Phe Arg Ser Arg Trp Xaa Thr
                 85                  90                  95

Ser Trp Glu Thr Trp Gln Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val
            100                 105                 110

Leu Arg Ala Xaa Arg Pro Asp Ser Tyr Leu Gln Arg Phe Arg Ser Leu
        115                 120                 125

Xaa Gln Xaa Xaa Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly
    130                 135                 140

Cys Phe Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala
145                 150                 155                 160

Trp Gln Xaa Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn
                165                 170                 175

Asp Leu Glu Arg Gln Gly Leu Leu Ser Gly Xaa Gly Ala Ser Thr Glu
            180                 185                 190

Glu Pro
```

<210> 316
<211> 26
<212> PRT
<213> Homo sapiens

<400> 316

Leu Arg Gly Gly Thr Arg Lys Ser Phe Gln Glu Leu Ser Pro Ser Ser
1 5 10 15

Ala Pro Pro Ala Cys Leu Pro Gln Pro Pro
20 25

<210> 317
<211> 28
<212> PRT
<213> Homo sapiens

<400> 317
Ala Thr Gly Gln Trp Leu Pro Thr Ser Cys Cys Leu Trp Trp Cys Pro
1 5 10 15

Asp Ala Gly Gly Arg Gln Lys His Phe Arg Ser Arg
20 25

<210> 318
<211> 22
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 318
Gly Gly Cys Phe Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr
1 5 10 15

Arg Ala Trp Gln Xaa Val
20

<210> 319
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 319

```
Ala Pro His Leu Arg Leu Gln Pro Ala Cys His Ser Pro Leu Pro Leu
  1               5                  10                  15

Pro Gly Ser Arg Pro Gly Pro Asp His Pro Ala Gly Leu Leu Cys Val
             20                  25                  30

Pro Gly Pro Trp Gly Xaa Ala Ser Val Leu Gln Leu Gly Ser Gly Cys
         35                  40                  45

Arg His Pro Ala Val Cys Gly Gly Ala Gln Met Pro Gly Asp Gly Arg
     50                  55                  60

Ser Thr Ser Asp His Gly Gly Xaa His Pro Gly Xaa Pro Gly Ser Pro
 65                  70                  75                  80

Ile Ser Gln Asp Leu Ser Leu Val Ser Cys Gly Pro Xaa Ala Leu Thr
                 85                  90                  95

Pro Ile Cys Ser Ala Ser Ala Ala Xaa Xaa Xaa Xaa Xaa Cys Ala Ala
             100                 105                 110

Pro Leu Ser Ser Pro Trp Gly Ala Ala Ala Ser Cys
         115                 120
```

<210> 320
<211> 25
<212> PRT
<213> Homo sapiens

<400> 320
Pro Ala Cys His Ser Pro Leu Pro Leu Pro Gly Ser Arg Pro Gly Pro
1 5 10 15

Asp His Pro Ala Gly Leu Leu Cys Val
20 25

<210> 321
<211> 26
<212> PRT
<213> Homo sapiens

<400> 321
Ser Gly Cys Arg His Pro Ala Val Cys Gly Gly Ala Gln Met Pro Gly
1 5 10 15

Asp Gly Arg Ser Thr Ser Asp His Gly Gly
20 25

<210> 322
<211> 95
<212> PRT
<213> Homo sapiens

<400> 322
Gly Leu Lys Val Met Glu Ile Cys Ser Leu Thr Phe Leu Glu Ala Thr
1 5 10 15

Asn Leu Gln Ser Arg Cys Gln Gln Ala Met Leu Pro Leu Lys Ala Leu
20 25 30

Arg Lys Asn Pro Phe Leu Leu Leu Pro Ser Phe Asp Gly Cys Cys Gln
35 40 45

Ser Leu Ala Phe Pro Gly Leu Trp Leu Gln His Ser Asn Leu Cys Leu
50 55 60

Asn His His Met Thr Phe Leu Val Tyr Leu Leu Cys Val Ser Val Phe
65 70 75 80

Lys Tyr Phe Phe Pro Phe Ser Cys Thr Tyr Thr Ser His Trp Ile
85 90 95

<210> 323
<211> 22
<212> PRT
<213> Homo sapiens

<400> 323

Ile Cys Ser Leu Thr Phe Leu Glu Ala Thr Asn Leu Gln Ser Arg Cys
1 5 10 15

Gln Gln Ala Met Leu Pro
20

<210> 324
<211> 26
<212> PRT
<213> Homo sapiens

<400> 324
Gly Leu Trp Leu Gln His Ser Asn Leu Cys Leu Asn His His Met Thr
1 5 10 15

Phe Leu Val Tyr Leu Leu Cys Val Ser Val
20 25

<210> 325
<211> 37
<212> PRT
<213> Homo sapiens

<400> 325
Pro Phe Pro Leu Leu Pro Pro Lys Arg Arg Gly Leu Leu Tyr His Leu
1 5 10 15

Ile Gln Lys Ser Thr Leu Gly Leu Val Val Trp Phe Arg Glu His Leu
20 25 30

Asp Ser Arg Ser Gln
35

<210> 326
<211> 78
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 326
Arg Gly Xaa Pro Ser Trp Pro Met His Thr Leu Val Tyr Ala Gln His
1 5 10 15

Ser Thr Thr His Thr Pro Leu Ile Gln Pro Gln Trp Thr Gln Val Ile
20 25 30

Asp Gln Pro Pro Gly Ile Thr His Gln Phe Cys Val Arg Xaa Cys Xaa
35 40 45

Cys Pro Thr Leu Glu Ser Cys Val Gln Glu Cys Val Thr Arg Ser Arg
50 55 60

Xaa Lys Pro Thr Thr Gly Val Pro Gly Pro Gln Arg Leu Ala
65 70 75

<210> 327
<211> 24
<212> PRT
<213> Homo sapiens

<400> 327
Thr Pro Leu Ile Gln Pro Gln Trp Thr Gln Val Ile Asp Gln Pro Pro
1 5 10 15

Gly Ile Thr His Gln Phe Cys Val
20

<210> 328
<211> 104
<212> PRT
<213> Homo sapiens

<400> 328
Ala Leu Gly Pro Ser Gln Thr Cys Asp Leu Asp Val Trp Leu Val Ala
1 5 10 15

Lys Pro Ser Phe Phe Arg Gly Pro Gln Gly Ile His Tyr Phe Ser Leu
20 25 30

Trp Arg Arg Lys Pro Leu Ser His Trp Val Ser Ile Trp Gln Leu Gln
35 40 45

Gly Gln Glu Thr Met Pro Ala Met Leu Arg Ser Arg Pro Ala Gly Gln
50 55 60

Ala Thr Val Ala Thr Gly Pro Pro Arg Gly Ser Pro Ser Pro Gln Asp
65 70 75 80

Leu Pro Ser Tyr His Arg Lys Gln Val Glu Ser Ser His Arg His Ser
85 90 95

Trp Glu Pro Ala Ser Gln Ser Gln
100

<210> 329
<211> 28
<212> PRT
<213> Homo sapiens

<400> 329
Cys Asp Leu Asp Val Trp Leu Val Ala Lys Pro Ser Phe Phe Arg Gly
1 5 10 15

Pro Gln Gly Ile His Tyr Phe Ser Leu Trp Arg Arg
20 25

<210> 330
<211> 28
<212> PRT
<213> Homo sapiens

<400> 330
Ala Gly Gln Ala Thr Val Ala Thr Gly Pro Pro Arg Gly Ser Pro Ser
1 5 10 15

Pro Gln Asp Leu Pro Ser Tyr His Arg Lys Gln Val
20 25

<210> 331
<211> 79
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 331
Xaa Gly Asp Thr Xaa Thr Gln Asn Ser Arg His Asp Thr Pro Xaa Leu
1 5 10 15

Ile Asp Tyr Tyr Arg Glu Ser Cys Thr Leu Gln Tyr Arg Pro Glu Phe
20 25 30

Pro Gly Arg Pro Thr Arg Pro Arg Gly Ser Cys Pro Gln Tyr Pro Gly
35 40 45

Pro Ala Ile Pro Arg Thr Ser Trp Ala Leu Gly Glu Gly Asp Ala Ala
50 55 60

Pro Arg Gly Ala His His Pro Arg Arg Ala Asp Val Pro Leu Gly
65 70 75

<210> 332
<211> 30
<212> PRT
<213> Homo sapiens

<400> 332
Tyr Arg Glu Ser Cys Thr Leu Gln Tyr Arg Pro Glu Phe Pro Gly Arg
1 5 10 15

Pro Thr Arg Pro Arg Gly Ser Cys Pro Gln Tyr Pro Gly Pro
20 25 30

<210> 333
<211> 155
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 333
Gly Lys Leu Tyr Ala Ala Val Pro Ser Gly Ile Pro Gly Ser Thr His
1 5 10 15

Ala Ser Ala Arg Leu Met Pro Pro Val Ser Arg Ser Ser Tyr Ser Glu
20 25 30

Asp Ile Val Gly Ser Arg Arg Arg Arg Ser Ser Ser Gly Ser Pro
35 40 45

Pro Ser Pro Gln Ser Arg Cys Ser Ser Trp Asp Gly Cys Ser Arg Ser
50 55 60

His Ser Arg Gly Arg Glu Gly Xaa Arg Pro Pro Trp Ser Glu Leu Asp
65 70 75 80

Val Gly Ala Leu Tyr Pro Phe Ser Arg Ser Gly Ser Arg Gly Arg Leu
85 90 95

Pro Arg Phe Arg Asn Tyr Ala Phe Ala Ser Ser Trp Ser Thr Ser Tyr
100 105 110

Ser Gly Tyr Arg Tyr His Arg Ala Leu Leu Cys Arg Arg Thr Ala Val

115 120 125

Ser Gly Arg Leu Arg Glu Gly Arg Glu Pro Ser Ala Glu Glu Ala Glu
130 135 140

Gly Glu Arg Glu Asp Trp Gly Ile Gly Ser Ala
145 150 155

<210> 334
<211> 23
<212> PRT
<213> Homo sapiens

<400> 334
Ser Gly Ile Pro Gly Ser Thr His Ala Ser Ala Arg Leu Met Pro Pro
1 5 10 15

Val Ser Arg Ser Ser Tyr Ser
20

<210> 335
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 335
Gly Cys Ser Arg Ser His Ser Arg Gly Arg Glu Gly Xaa Arg Pro Pro
1 5 10 15

Trp Ser Glu Leu Asp Val Gly Ala Leu Tyr Pro Phe Ser
20 25

<210> 336
<211> 25
<212> PRT
<213> Homo sapiens

<400> 336
Thr Ala Val Ser Gly Arg Leu Arg Glu Gly Arg Glu Pro Ser Ala Glu
1 5 10 15

Glu Ala Glu Gly Glu Arg Glu Asp Trp
20 25

<210> 337
<211> 134
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 337
Arg Ile Arg Lys Ala Ala Val Gln Ile Pro Thr Arg Lys Asn Ile Gly
1 5 10 15

Xaa Arg Arg Pro Val Val Gln Glu Thr Arg Lys Lys Glu Arg Ile Ser
20 25 30

Arg Leu Lys Glu Ser Ile Gly Asn Ile Leu Ile Val Thr Val Thr Gln
35 40 45

Ser Leu Thr Gln Ile Leu Thr Leu Met Met Ile Lys Arg Glu Leu Lys
50 55 60

Pro Arg Arg Lys Arg Arg Lys Arg Asn Thr Lys Gln Xaa Lys Arg Arg
65 70 75 80

Ile Arg Lys Pro Lys Lys Asn Pro Val Thr Gln Ala Val Lys Thr Gln
85 90 95

Lys Arg Thr Cys Gln Lys Leu Pro Gly Met Glu Gln Pro Asn Val Ala
100 105 110

Asp Thr Met Asp Leu Ile Gly Pro Glu Ala Pro Ile Asn Thr Tyr Leu
115 120 125

Phe Lys Met Lys Asn Leu
130

<210> 338
<211> 28
<212> PRT
<213> Homo sapiens

<400> 338
Thr Arg Lys Lys Glu Arg Ile Ser Arg Leu Lys Glu Ser Ile Gly Asn
1 5 10 15

Ile Leu Ile Val Thr Val Thr Gln Ser Leu Thr Gln
20 25

<210> 339
<211> 28
<212> PRT
<213> Homo sapiens

<400> 339
Val Lys Thr Gln Lys Arg Thr Cys Gln Lys Leu Pro Gly Met Glu Gln
1 5 10 15

Pro Asn Val Ala Asp Thr Met Asp Leu Ile Gly Pro
20 25

<210> 340
<211> 80
<212> PRT
<213> Homo sapiens

<400> 340
Leu Pro Phe Thr Leu Lys Pro Lys Met Val Lys Ile Pro Phe Ser Ser
1 5 10 15

Arg Leu Ile Asn Asn Asn Leu Gln Tyr Ile Asp Cys Ile Leu Ser Leu
20 25 30

Lys Arg Cys Glu Glu Ile Leu Leu Met Trp His Gly Leu Leu Leu Cys
35 40 45

Leu Ala Ser Val Phe Leu Glu Leu Arg Gly Asp Arg Pro Pro Leu Leu
50 55 60

Ala Ser Leu Leu Glu Pro His Lys Met Pro Leu His Ser Ser Ser Leu
65 70 75 80

<210> 341
<211> 24
<212> PRT
<213> Homo sapiens

<400> 341
Leu Lys Pro Lys Met Val Lys Ile Pro Phe Ser Ser Arg Leu Ile Asn
1 5 10 15

Asn Asn Leu Gln Tyr Ile Asp Cys
20

<210> 342
<211> 23
<212> PRT
<213> Homo sapiens

<400> 342
Ser Leu Lys Arg Cys Glu Glu Ile Leu Leu Met Trp His Gly Leu Leu
1 5 10 15

Leu Cys Leu Ala Ser Val Phe

20

<210> 343
<211> 21
<212> PRT
<213> Homo sapiens

<400> 343
Leu Arg Gly Asp Arg Pro Pro Leu Leu Ala Ser Leu Leu Glu Pro His
1 5 10 15

Lys Met Pro Leu His
20

<210> 344
<211> 79
<212> PRT
<213> Homo sapiens

<400> 344
Leu Gln Met His Thr Gly Ser Gly Phe Lys Gly Lys Ser Cys Glu Val
1 5 10 15

Ala Phe Tyr Val Ala Gln Ala Glu Lys Pro Gly Glu Gly Ala Tyr Leu
20 25 30

His Gly Ala Gln Glu Thr Gln Lys Gln Gly Ile Glu Ala Asp His Ala
35 40 45

Thr Leu Arg Gly Ser Pro His Ser Val Ser Lys Thr Lys Tyr Asn Leu
50 55 60

Tyr Ile Ala Asn Tyr Tyr Leu Leu Ala Trp Arg Lys Met Glu Ser
65 70 75

<210> 345
<211> 20
<212> PRT
<213> Homo sapiens

<400> 345
Cys Glu Val Ala Phe Tyr Val Ala Gln Ala Glu Lys Pro Gly Glu Gly
1 5 10 15

Ala Tyr Leu His
20

<210> 346
<211> 23
<212> PRT
<213> Homo sapiens

<400> 346

180

Ala Thr Leu Arg Gly Ser Pro His Ser Val Ser Lys Thr Lys Tyr Asn
1 5 10 15

Leu Tyr Ile Ala Asn Tyr Tyr
20

<210> 347
<211> 65
<212> PRT
<213> Homo sapiens

<400> 347
Leu Ser Ala Ser Leu Leu Asp Arg Tyr Pro Ala Ser Glu Ser Asn Asn
1 5 10 15

Tyr Ile Phe Asn Phe Val Leu Tyr Met Leu His Phe Leu Ala Gly Thr
20 25 30

Leu Phe Ser Leu Phe Pro Asp Phe Glu Leu Ser Pro Arg Ser Ala Thr
35 40 45

Leu Phe Pro Asp Leu Arg Thr Val Gln Leu Leu Ser Ser Arg Pro His
50 55 60

Leu
65

<210> 348
<211> 23
<212> PRT
<213> Homo sapiens

<400> 348
Leu Leu Asp Arg Tyr Pro Ala Ser Glu Ser Asn Asn Tyr Ile Phe Asn
1 5 10 15

Phe Val Leu Tyr Met Leu His
20

<210> 349
<211> 20
<212> PRT
<213> Homo sapiens

<400> 349
Phe Pro Asp Phe Glu Leu Ser Pro Arg Ser Ala Thr Leu Phe Pro Asp
1 5 10 15

Leu Arg Thr Val
20

<210> 350
<211> 85

<212> PRT
<213> Homo sapiens

<400> 350
Asn Gly Gly Phe Tyr Asp Val Ser Phe Lys Gln Ala Gly Leu Ile Glu
1 5 10 15

Phe Leu Cys Ile Ile Tyr Phe Tyr Pro Met Ala His Val Ile Cys Gly
20 25 30

Ser Arg Phe Thr Ile Val Arg Thr Ile Pro Val His Tyr Val Gly Glu
35 40 45

Tyr Phe Ile Lys Ser Ser Ile Trp Ile Leu Tyr Arg Ile Asn Glu Arg
50 55 60

Thr Ala Thr Lys Lys Ala Ala Ser Asp Phe Gln Lys Asn Phe Arg Cys
65 70 75 80

Phe Leu Asp Ala Phe
85

<210> 351
<211> 19
<212> PRT
<213> Homo sapiens

<400> 351
Lys Gln Ala Gly Leu Ile Glu Phe Leu Cys Ile Ile Tyr Phe Tyr Pro
1 5 10 15

Met Ala His

<210> 352
<211> 23
<212> PRT
<213> Homo sapiens

<400> 352
Tyr Phe Ile Lys Ser Ser Ile Trp Ile Leu Tyr Arg Ile Asn Glu Arg
1 5 10 15

Thr Ala Thr Lys Lys Ala Ala
20

<210> 353
<211> 22
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 353
Ser Pro Arg Xaa Gly Arg Xaa Phe Xaa Thr Ser Arg Lys Gln Ile Ser
1 5 10 15

Gly Phe Leu Glu Phe Asp
20

<210> 354
<211> 56
<212> PRT
<213> Homo sapiens

<400> 354
Met Lys His Ala Ala Phe Gly Leu Ile Pro Leu Val Lys Glu Ile Tyr
1 5 10 15

Arg Tyr Leu Lys Ile Lys Ser Lys Leu Leu Ile Gly Ser Gly Lys Cys
20 25 30

Gln Leu Gln Pro Glu Trp Leu Gln Thr Ser Leu Ile Asn Ser Ser Leu
35 40 45

Leu Met Asp Trp Leu Thr Pro Tyr
50 55

<210> 355
<211> 29
<212> PRT
<213> Homo sapiens

<400> 355
Ile Tyr Arg Tyr Leu Lys Ile Lys Ser Lys Leu Leu Ile Gly Ser Gly
1 5 10 15

Lys Cys Gln Leu Gln Pro Glu Trp Leu Gln Thr Ser Leu
20 25

<210> 356
<211> 68
<212> PRT
<213> Homo sapiens

<400> 356
Gln Leu Gly Leu Pro Trp Asp Gln Ser Lys Gly Pro Arg Lys Asn Gly
1 5 10 15

Leu Ser Met Cys Gly Ser Val Tyr Ser Thr Ile Trp Ser Leu Ile Ala
20 25 30

Ser Arg Arg Glu Glu Thr Ile Arg Val Ile Val Leu Tyr Ile Gln Ser
35 40 45

Pro Asn Ile Asn Thr Arg His Ile Ser Lys Arg Gly Leu Asn Lys Ala
50 55 60

Leu Thr Asn Pro
65

<210> 357
<211> 21
<212> PRT
<213> Homo sapiens

<400> 357
Ser Lys Gly Pro Arg Lys Asn Gly Leu Ser Met Cys Gly Ser Val Tyr
1 5 10 15

Ser Thr Ile Trp Ser
20

<210> 358
<211> 17
<212> PRT
<213> Homo sapiens

<400> 358
Gln Ser Pro Asn Ile Asn Thr Arg His Ile Ser Lys Arg Gly Leu Asn
1 5 10 15

Lys

<210> 359
<211> 19
<212> PRT
<213> Homo sapiens

<400> 359
His Pro Gln Thr Ser Ala Gly Gly Phe Pro Leu His Gln Gly Leu Pro
1 5 10 15

Thr Val Ser

<210> 360

<211> 117
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 360
Pro Ser Trp Phe Pro Glu Leu Ser Pro Trp Pro Leu Lys Thr Leu Lys
1 5 10 15

Lys Arg Arg Gln Met Arg Leu Arg Arg Arg Gly Arg Leu Cys Arg Leu
20 25 30

Ser Pro Ala Thr Thr Thr Thr Ala Asp Thr Cys Arg Cys Pro Ala Arg
35 40 45

Ser Tyr Arg Gly Ser Gly Arg Arg Pro Ala Cys Ala Gln Asp Ser Pro
50 55 60

Ala Pro Pro Ser Arg Pro Thr Arg Arg Ala Trp Glu Lys Cys Ala Leu
65 70 75 80

Arg Pro Lys Arg Ala Ala Gln Trp Ser Thr Gly Val Pro Pro Ser Pro
85 90 95

Arg Ser Ser Thr Thr Gly Cys Cys Phe Gly Thr Ala Ala Xaa Cys Ala
100 105 110

Glu Gly Ala Arg Arg
115

<210> 361
<211> 22
<212> PRT
<213> Homo sapiens

<400> 361
Thr Thr Thr Ala Asp Thr Cys Arg Cys Pro Ala Arg Ser Tyr Arg Gly
1 5 10 15

Ser Gly Arg Arg Pro Ala
20

<210> 362
<211> 24
<212> PRT
<213> Homo sapiens

<400> 362
Pro Ser Arg Pro Thr Arg Arg Ala Trp Glu Lys Cys Ala Leu Arg Pro
1 5 10 15

Lys Arg Ala Ala Gln Trp Ser Thr
20

<210> 363
<211> 20
<212> PRT
<213> Homo sapiens

<400> 363
Ala Arg Gly Val Leu Asn Leu Arg Asn Arg Phe Glu Cys Phe Ser Ile
1 5 10 15

Ile Glu Thr Val
20

<210> 364
<211> 69
<212> PRT
<213> Homo sapiens

<400> 364
Ile Gly Gln Leu Val Met Lys Ser Ile Cys His Phe Gln Arg Leu Leu
1 5 10 15

Ser Val Ala Ile Asp Phe Ala Ser Gln Phe Leu Lys Asn Tyr Ile Phe
20 25 30

Ser Ser Thr His Ser Ser Lys Ala Gly Phe Ser Val Val Cys Ser Leu
35 40 45

Pro Lys Trp Leu Tyr Thr Asp Gly Met Glu Met Val Leu Lys Ile Thr
50 55 60

His Lys Leu Ser Phe
65

<210> 365
<211> 24
<212> PRT
<213> Homo sapiens

<400> 365
Gln Arg Leu Leu Ser Val Ala Ile Asp Phe Ala Ser Gln Phe Leu Lys
1 5 10 15

Asn Tyr Ile Phe Ser Ser Thr His
20

<210> 366
<211> 12
<212> PRT
<213> Homo sapiens

<400> 366
Leu Met Lys Thr Ala Ser Arg Met Leu Leu Glu
1 5 10

<210> 367
<211> 25
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 367
Ala Thr Xaa Trp Asp Xaa Pro Gly Cys Arg Asn Ser Ala Arg Gly Glu
1 5 10 15

Arg Leu His Val Gly Asp Ala Pro Trp
20 25

<210> 368
<211> 109
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 368
Ala Arg Asp Glu Arg Arg Glu Val Leu Lys Thr Leu Met Arg Leu Ser
1 5 10 15

Thr Gln Arg Pro Gln Ala Phe Leu Pro Ser Gln Ser Trp Phe Val Arg
20 25 30

Leu Gln Lys Ala Gly Glu Gly Ala Leu Lys Gln Glu Asn Ser Leu Thr
35 40 45

Ile Gln Asn Cys Leu Leu Cys Leu Pro Arg Val His Arg Gln Arg Pro
50 55 60

Thr Pro Pro Gln Pro Gln Arg Gly Asn Thr Glu Ala Ser Val Leu Gln

65 70 75 80

Thr Ser Thr Glu His Leu Pro Arg Ala Ala Val Leu Leu Val Pro Asn
85 90 95

Ser Cys Ser Pro Gly Xaa Pro Thr Xaa Leu Leu Ser Ser
100 105

<210> 369
<211> 22
<212> PRT
<213> Homo sapiens

<400> 369
Glu Arg Arg Glu Val Leu Lys Thr Leu Met Arg Leu Ser Thr Gln Arg
1 5 10 15

Pro Gln Ala Phe Leu Pro
20

<210> 370
<211> 25
<212> PRT
<213> Homo sapiens

<400> 370
Gly Ala Leu Lys Gln Glu Asn Ser Leu Thr Ile Gln Asn Cys Leu Leu
1 5 10 15

Cys Leu Pro Arg Val His Arg Gln Arg
20 25

<210> 371
<211> 21
<212> PRT
<213> Homo sapiens

<400> 371
Ser Val Leu Gln Thr Ser Thr Glu His Leu Pro Arg Ala Ala Val Leu
1 5 10 15

Leu Val Pro Asn Ser
20

<210> 372
<211> 9
<212> PRT
<213> Homo sapiens

<400> 372
Ala Leu Val Ile Ser Asn Pro Leu Leu
1 5

<210> 373
<211> 63
<212> PRT
<213> Homo sapiens

<400> 373
Pro Tyr Ile Asn Thr Gln Met Cys Val Ser Ser Arg Asn Lys Phe Cys
1 5 10 15

Ile Ser Gly His Gln Lys Tyr Asp Ser His Gly Arg Glu Thr Arg Phe
20 25 30

Glu Met His Lys Ala Arg Ala Ser Ser Trp Lys Asn Ile Leu Lys Ile
35 40 45

Arg Ser Leu Lys Ile Ile Ser Arg Gly Phe Glu Ile Thr Asn Ala
50 55 60

<210> 374
<211> 27
<212> PRT
<213> Homo sapiens

<400> 374
Lys Phe Cys Ile Ser Gly His Gln Lys Tyr Asp Ser His Gly Arg Glu
1 5 10 15

Thr Arg Phe Glu Met His Lys Ala Arg Ala Ser
20 25

<210> 375
<211> 84
<212> PRT
<213> Homo sapiens

<400> 375
His Thr Leu Leu Glu Ile Ala Asn Pro Leu Gln Ala Ala Val Leu Gly
1 5 10 15

Ala Ser Ser Ile His Pro Ser Ile His Thr Ser Thr His Leu Met Phe
20 25 30

Met Gly Leu Lys Trp Thr Glu Leu His His Ser Pro Asp Ser Val Gln
35 40 45

Gly Ala Gly Ala Ala Glu Ala Ala Gln Thr Arg His Ser Leu Arg Pro
50 55 60

Gly Arg Gly Arg Glu Arg His Asp Cys Thr Leu Lys Asn Leu Thr Leu
65 70 75 80

Phe Ile Ile Cys

<210> 376
<211> 22
<212> PRT
<213> Homo sapiens

<400> 376
Asn Pro Leu Gln Ala Ala Val Leu Gly Ala Ser Ser Ile His Pro Ser
1 5 10 15

Ile His Thr Ser Thr His
20

<210> 377
<211> 17
<212> PRT
<213> Homo sapiens

<400> 377
Ser Leu Arg Pro Gly Arg Gly Arg Glu Arg His Asp Cys Thr Leu Lys
1 5 10 15

Asn

<210> 378
<211> 52
<212> PRT
<213> Homo sapiens

<400> 378
Ala Glu Asn Val His Cys Thr Pro Ala Trp Glu Thr Gly Arg Asp Ser
1 5 10 15

Glu Asp Gly Lys Gly Arg Glu Gly Met Gly Arg Asp Arg Lys Gly Trp
20 25 30

Asp Gly Thr Gly Leu Asp Gly Thr Gly Trp Glu Gly Lys Arg Glu Arg
35 40 45

Asn Val Pro Ala
50

<210> 379
<211> 26
<212> PRT
<213> Homo sapiens

<400> 379
Gly Arg Asp Ser Glu Asp Gly Lys Gly Arg Glu Gly Met Gly Arg Asp
1 5 10 15

Arg Lys Gly Trp Asp Gly Thr Gly Leu Asp
20 25

<210> 380
<211> 14
<212> PRT
<213> Homo sapiens

<400> 380
Thr Ser Leu Gly Asp Leu Trp Asp Tyr Asn Asn Ser Ser His
1 5 10

<210> 381
<211> 66
<212> PRT
<213> Homo sapiens

<400> 381
Asp Arg Arg Ile Ile Arg Thr Arg Glu Ala Ala Val Ala Val Ser Arg
1 5 10 15

Glu Arg Pro Leu His Ser Ser Leu Gly Asn Arg Glu Arg Leu Arg Arg
20 25 30

Trp Glu Gly Thr Gly Arg Asp Gly Lys Gly Gln Glu Gly Met Gly Arg
35 40 45

Asp Gly Thr Gly Trp Asp Gly Met Gly Arg Glu Glu Arg Lys Lys Cys
50 55 60

Pro Ser
65

<210> 382
<211> 25
<212> PRT
<213> Homo sapiens

<400> 382
Arg Pro Leu His Ser Ser Leu Gly Asn Arg Glu Arg Leu Arg Arg Trp
1 5 10 15

Glu Gly Thr Gly Arg Asp Gly Lys Gly
20 25

<210> 383
<211> 9
<212> PRT
<213> Homo sapiens

<400> 383
Asn Gln Ser Trp Gly Pro Met Gly Leu
1 5

<210> 384
<211> 59
<212> PRT
<213> Homo sapiens

<400> 384
Gly Gly Gly Gly Cys Ser Glu Pro Arg Thr Ser Ile Ala Leu Gln Pro
1 5 10 15

Gly Lys Gln Gly Glu Thr Pro Lys Met Gly Arg Asp Gly Lys Gly Trp
20 25 30

Glu Gly Thr Gly Arg Asp Gly Thr Gly Arg Asp Trp Met Gly Arg Asp
35 40 45

Gly Lys Gly Arg Glu Lys Glu Met Ser Gln Gln
50 55

<210> 385
<211> 24
<212> PRT
<213> Homo sapiens

<400> 385
Lys Gln Gly Glu Thr Pro Lys Met Gly Arg Asp Gly Lys Gly Trp Glu
1 5 10 15

Gly Thr Gly Arg Asp Gly Thr Gly
20

<210> 386
<211> 32
<212> PRT
<213> Homo sapiens

<400> 386
Pro Val Leu Gly Thr Tyr Gly Thr Ile Thr Thr Pro Val Thr Glu Leu
1 5 10 15

Thr Lys Gly Gln Glu Lys Glu Gly Gly Val Glu Thr Val Leu Tyr Glu
20 25 30

<210> 387
<211> 11
<212> PRT
<213> Homo sapiens

<400> 387
Lys Ile Val Phe Ile Asp Gln Lys Trp Ser Lys
1 5 10

<210> 388
<211> 70
<212> PRT
<213> Homo sapiens

<400> 388
Cys Ser Leu Phe Trp Gly Ile Leu Phe Leu Ser Arg Leu Arg Ile His
1 5 10 15

Leu Phe Leu Ser Leu Lys Pro Cys Met Cys Leu Arg Pro Ile Asp Ile
20 25 30

Leu Ser His Phe Leu Asp Ile Phe Val Thr Ser Val Leu Ser Glu Leu
35 40 45

Glu Lys Ser Ser Leu Lys Thr Thr Glu Thr Phe Ser Phe Ala Val Phe
50 55 60

Leu Leu Leu Met Met Asn
65 70

<210> 389
<211> 26
<212> PRT
<213> Homo sapiens

<400> 389
Leu Ser Arg Leu Arg Ile His Leu Phe Leu Ser Leu Lys Pro Cys Met
1 5 10 15

Cys Leu Arg Pro Ile Asp Ile Leu Ser His
20 25

<210> 390
<211> 22
<212> PRT
<213> Homo sapiens

<400> 390
Val Leu Ser Glu Leu Glu Lys Ser Ser Leu Lys Thr Thr Glu Thr Phe
1 5 10 15

Ser Phe Ala Val Phe Leu
20

<210> 391
<211> 8
<212> PRT
<213> Homo sapiens

<400> 391
Thr Leu Phe Arg Tyr Ile Leu His
1 5

<210> 392
<211> 14
<212> PRT
<213> Homo sapiens

<400> 392
Gly Thr Ser Phe Ser Val Leu Ser Leu Ile His Asp Thr Gly
1 5 10

<210> 393
<211> 63
<212> PRT
<213> Homo sapiens

<400> 393
Val Leu Ile Ser Ala Ser Thr Ile Gly Ser Arg Thr Ser Gly Ala Gln
1 5 10 15

Gly Met Glu Lys Met Thr Ile Pro Thr Leu Ala Val Gly Glu Pro Lys
20 25 30

Thr Pro Glu Lys Ser Lys Cys Ser Leu Lys Gln Cys Phe Ser Ser Cys
35 40 45

Asn Val His Ile Asp His Leu Gly Leu Leu Leu Lys Cys Lys Phe
50 55 60

<210> 394
<211> 23
<212> PRT
<213> Homo sapiens

<400> 394
Ala Ser Thr Ile Gly Ser Arg Thr Ser Gly Ala Gln Gly Met Glu Lys
1 5 10 15

Met Thr Ile Pro Thr Leu Ala
20

<210> 395
<211> 27
<212> PRT
<213> Homo sapiens

<400> 395
Gly Glu Pro Lys Thr Pro Glu Lys Ser Lys Cys Ser Leu Lys Gln Cys
1 5 10 15

Phe Ser Ser Cys Asn Val His Ile Asp His Leu
20 25

<210> 396
<211> 101
<212> PRT
<213> Homo sapiens

<400> 396
Arg Ile Arg Ser Gln Asp Leu Ala Ile Met Thr Thr Cys Phe Lys Lys
1 5 10 15

Tyr Glu Phe Ser Phe Phe Val Leu Gly Phe Leu Arg Arg Trp Gly Ala
20 25 30

Thr Leu Cys Leu Gly Phe Thr Ser Phe Ala Ile Lys Phe His Pro Ser
35 40 45

Ser Leu Cys Ser Glu Lys Glu Gly Lys Asp Phe Ser Gly Phe Ala Leu
50 55 60

Ser Ile His Gly Pro Glu Arg Lys Lys Glu Glu Gly Trp Ala Arg Trp
65 70 75 80

Leu Thr Pro Val Val Pro Val Leu Trp Glu Ala Glu Val Gly Gly Ser
85 90 95

Pro Glu Val Ser Ser
100

<210> 397
<211> 22
<212> PRT
<213> Homo sapiens

<400> 397
Thr Thr Cys Phe Lys Lys Tyr Glu Phe Ser Phe Phe Val Leu Gly Phe
1 5 10 15

Leu Arg Arg Trp Gly Ala
20

<210> 398
<211> 26
<212> PRT
<213> Homo sapiens

<400> 398
Ser Glu Lys Glu Gly Lys Asp Phe Ser Gly Phe Ala Leu Ser Ile His
1 5 10 15

Gly Pro Glu Arg Lys Lys Glu Glu Gly Trp
20 25

<210> 399
<211> 86
<212> PRT

<213> Homo sapiens

<400> 399
Met Asn Glu Cys Ile Ala Lys Pro Cys Met Ala Ala Phe Cys Ser Cys
1 5 10 15

Pro Ser Cys Cys Leu Pro Ser Arg Pro Gly Cys Ser Arg Glu Gln Arg
20 25 30

Cys Ala Phe Ser Cys Glu Pro Cys His Thr Val Glu His Trp Val Glu
35 40 45

Pro Met Gly Gln Gly Gln Arg Gln Glu His Thr Gln Gly Ser Val Leu
50 55 60

Pro Ser Ser His Pro Ser Arg Gly Lys Ala Thr Thr Val His Ser Cys
65 70 75 80

Cys Gln Glu Pro Trp Gly
85

<210> 400
<211> 27
<212> PRT
<213> Homo sapiens

<400> 400
Phe Cys Ser Cys Pro Ser Cys Cys Leu Pro Ser Arg Pro Gly Cys Ser
1 5 10 15

Arg Glu Gln Arg Cys Ala Phe Ser Cys Glu Pro
20 25

<210> 401
<211> 23
<212> PRT
<213> Homo sapiens

<400> 401
Gly Gln Arg Gln Glu His Thr Gln Gly Ser Val Leu Pro Ser Ser His
1 5 10 15

Pro Ser Arg Gly Lys Ala Thr
20

<210> 402
<211> 139
<212> PRT
<213> Homo sapiens

<400> 402
Gly Val Val Asn Ser Cys Leu Leu Pro Leu Pro Pro Arg Leu Leu Ala
1 5 10 15

Thr Gly Met Asp Cys Gly Gly Phe Ala Ser Arg Arg Met Gly Gly Arg
20 25 30

Gln His Ala Ala Leu Ser Val Phe Leu Pro Leu Pro Leu Ala His Gly
35 40 45

Leu Tyr Pro Met Phe Asn Cys Val Ala Gly Leu Thr Gly Lys Gly Thr
50 55 60

Ser Leu Leu Ser Gly Ala Ala Arg Pro Ala Gly Glu Ala Ala Ala Arg
65 70 75 80

Ala Gly Thr Lys Gly Ser His Ala Arg Phe Gly Asn Ala Phe Ile His
85 90 95

Ser Phe Ile His Ser Phe Ile Glu Cys Leu Leu Asn Thr Tyr Cys Val
100 105 110

Pro Ser Ser Ala Leu Thr Ala Val Gly Ile Gly Asp Ile Leu Lys Asn
115 120 125

Lys Asn Asp Lys Ser Ser Cys Leu Cys Ser Cys
130 135

<210> 403
<211> 25
<212> PRT
<213> Homo sapiens

<400> 403
Gly Met Asp Cys Gly Gly Phe Ala Ser Arg Arg Met Gly Gly Arg Gln
1 5 10 15

His Ala Ala Leu Ser Val Phe Leu Pro
20 25

<210> 404
<211> 25
<212> PRT
<213> Homo sapiens

<400> 404
Leu Thr Gly Lys Gly Thr Ser Leu Leu Ser Gly Ala Ala Arg Pro Ala
1 5 10 15

Gly Glu Ala Ala Ala Arg Ala Gly Thr
20 25

<210> 405
<211> 22
<212> PRT
<213> Homo sapiens

<400> 405

Leu Asn Thr Tyr Cys Val Pro Ser Ser Ala Leu Thr Ala Val Gly Ile
1 5 10 15

Gly Asp Ile Leu Lys Asn
20

<210> 406
<211> 55
<212> PRT
<213> Homo sapiens

<400> 406
Thr Ser Leu Ser Gln Leu Trp His Phe Cys His Phe Trp Pro Val Lys
1 5 10 15

Phe Cys Cys Gly Gly Cys Pro Val His Cys Arg Met Phe Ser Ser Ile
20 25 30

Ser Gly Leu Tyr Leu Leu Asn Ala Ser Ala Pro Ser Leu Gln Leu Asn
35 40 45

Asp Pro Lys Cys Leu Gln Thr
50 55

<210> 407
<211> 28
<212> PRT
<213> Homo sapiens

<400> 407
Trp Pro Val Lys Phe Cys Cys Gly Gly Cys Pro Val His Cys Arg Met
1 5 10 15

Phe Ser Ser Ile Ser Gly Leu Tyr Leu Leu Asn Ala
20 25

<210> 408
<211> 20
<212> PRT
<213> Homo sapiens

<400> 408
Ser Cys Arg Cys Trp Ala Leu Gly Ala Gly Gly Gly Gln Arg Gln Trp
1 5 10 15

Val Gly Arg Ser
20

<210> 409
<211> 80
<212> PRT
<213> Homo sapiens

<400> 409
Thr Gly Ala Gln Ala Pro Lys Met Gly Ala Arg Gln Arg Lys Arg Pro
1 5 10 15

Leu Gln Thr Arg Ile Lys Asn Ser Ser Lys Ser Thr Leu Trp Pro Pro
20 25 30

Gln Trp Val Arg Cys Gly Arg Trp Trp Thr Trp Pro Ser Arg Lys Lys
35 40 45

Thr Ser Arg Pro Arg Arg Gln Leu Phe Thr Ser Thr Leu Ser Thr Ser
50 55 60

Ala Ser Ala Leu Val Trp Pro Val Ser Trp Phe Ser Gln Glu Gly His
65 70 75 80

<210> 410
<211> 25
<212> PRT
<213> Homo sapiens

<400> 410
Met Gly Ala Arg Gln Arg Lys Arg Pro Leu Gln Thr Arg Ile Lys Asn
1 5 10 15

Ser Ser Lys Ser Thr Leu Trp Pro Pro
20 25

<210> 411
<211> 23
<212> PRT
<213> Homo sapiens

<400> 411
Pro Arg Arg Gln Leu Phe Thr Ser Thr Leu Ser Thr Ser Ala Ser Ala
1 5 10 15

Leu Val Trp Pro Val Ser Trp
20

<210> 412
<211> 25
<212> PRT
<213> Homo sapiens

<400> 412
Asp Gly Gly Gly Lys Glu Glu Gly Val Ser Cys Leu Lys Ile Ser Leu
1 5 10 15

Leu Cys Gly Pro Trp Leu Trp Leu Pro
20 25

<210> 413
<211> 135
<212> PRT
<213> Homo sapiens

<400> 413
His Glu Met Gly Glu Leu Ala Ile Cys His Thr Arg Val Pro Phe Ser
1 5 10 15

Leu Pro Ser Ser Ala Gln Gly Val Pro Gln Asn Leu Gln Gly Pro Ile
20 25 30

Gly His Leu Ala Val Cys Thr Pro Ser Ser Leu Thr Ser Trp His Phe
35 40 45

Pro Gln Lys Arg Glu Lys Trp Ser Thr Val Asn Lys Arg Gln Arg Phe
50 55 60

Leu Gln Phe Pro Ala Pro Leu Arg Asn Trp Ile Pro Gln Thr Pro Leu
65 70 75 80

Ser Leu Ser Val Ser Ser Gly Pro Leu Gly Ser Phe Thr Val Phe Thr
85 90 95

Leu Leu Ser Leu Cys Ala Trp Pro Trp Cys Cys Arg Asp Cys Tyr Lys
100 105 110

Ser Cys Cys Pro Ile Pro Ile Phe Asn Leu Thr Ala Pro Leu Cys Val
115 120 125

His Thr Pro Glu Pro Ser Ser
130 135

<210> 414
<211> 23
<212> PRT
<213> Homo sapiens

<400> 414
Ser Ser Ala Gln Gly Val Pro Gln Asn Leu Gln Gly Pro Ile Gly His
1 5 10 15

Leu Ala Val Cys Thr Pro Ser
20

<210> 415
<211> 28
<212> PRT
<213> Homo sapiens

<400> 415
Val Asn Lys Arg Gln Arg Phe Leu Gln Phe Pro Ala Pro Leu Arg Asn
1 5 10 15

200

Trp Ile Pro Gln Thr Pro Leu Ser Leu Ser Val Ser
20 25

<210> 416
<211> 23
<212> PRT
<213> Homo sapiens

<400> 416
Cys Cys Arg Asp Cys Tyr Lys Ser Cys Cys Pro Ile Pro Ile Phe Asn
1 5 10 15

Leu Thr Ala Pro Leu Cys Val
20

<210> 417
<211> 150
<212> PRT
<213> Homo sapiens

<400> 417
Asp Leu Asn Val Thr Asn Glu Gly Glu Gly Lys Glu Val Leu Gly Gln
1 5 10 15

Gly Ser Thr Asn Asn Glu Lys Lys Cys Gln Lys Ala Thr Ser Asn Thr
20 25 30

Glu Pro Arg Ala Arg Glu Ala Lys Ala Arg His Ala Asn Met Gly Thr
35 40 45

Ser Asp Arg Glu Ser Pro Thr Trp Ser Leu Thr Ala Glu Gly Leu Lys
50 55 60

Ala Lys Ser Lys Met Gln Gly Lys Ala Thr Lys Gly Ala Ala Ser Thr
65 70 75 80

Met Gly Ser His Asn Gln Gly Pro His Lys Arg Glu Ile Phe Lys His
85 90 95

Glu Thr Pro Ser Ser Phe Pro Pro Pro Ser Gln Cys Gln Pro Glu Leu
100 105 110

Leu Pro Tyr Lys Tyr Trp Ala Thr Leu Ala Ser Gly Tyr Val Pro Ser
115 120 125

Trp Leu Pro Ser Val Asp Ser Tyr Arg Ile Asn Thr Ala Ile Lys Asp
130 135 140

Lys Asn Gly Gln Asp Thr
145 150

<210> 418
<211> 24

<212> PRT
<213> Homo sapiens

<400> 418
Val Leu Gly Gln Gly Ser Thr Asn Asn Glu Lys Lys Cys Gln Lys Ala
1 5 10 15

Thr Ser Asn Thr Glu Pro Arg Ala
20

<210> 419
<211> 29
<212> PRT
<213> Homo sapiens

<400> 419
Arg Glu Ser Pro Thr Trp Ser Leu Thr Ala Glu Gly Leu Lys Ala Lys
1 5 10 15

Ser Lys Met Gln Gly Lys Ala Thr Lys Gly Ala Ala Ser
20 25

<210> 420
<211> 22
<212> PRT
<213> Homo sapiens

<400> 420
Gly Tyr Val Pro Ser Trp Leu Pro Ser Val Asp Ser Tyr Arg Ile Asn
1 5 10 15

Thr Ala Ile Lys Asp Lys
20

<210> 421
<211> 12
<212> PRT
<213> Homo sapiens

<400> 421
Asn Ser Ala Glu Gln Ser Met Leu Ile Leu Val Thr
1 5 10

<210> 422
<211> 122
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 422
Arg Xaa Asp Arg Xaa Pro Val Pro Glu Leu Pro Gly Tyr Glu Pro Thr
1 5 10 15

Arg Thr Asp Ile Ser Ser Phe Lys Asn Ile Tyr Arg Tyr Ala Phe Asp
20 25 30

Phe Ala Arg Asp Lys Asp Gln Arg Ser Leu Asp Ile Asp Thr Ala Lys
35 40 45

Ser Met Leu Ala Leu Leu Leu Gly Arg Thr Trp Pro Leu Phe Ser Val
50 55 60

Phe Tyr Gln Tyr Leu Glu Gln Ser Lys Tyr Arg Val Met Asn Lys Asp
65 70 75 80

Gln Trp Tyr Asn Val Leu Glu Phe Ser Arg Thr Val His Ala Asp Leu
85 90 95

Ser Asn Tyr Asp Glu Asp Gly Ala Trp Pro Val Leu Leu Asp Glu Phe
100 105 110

Val Glu Trp Gln Lys Val Arg Gln Thr Ser
115 120

<210> 423
<211> 28
<212> PRT
<213> Homo sapiens

<400> 423
Pro Thr Arg Thr Asp Ile Ser Ser Phe Lys Asn Ile Tyr Arg Tyr Ala
1 5 10 15

Phe Asp Phe Ala Arg Asp Lys Asp Gln Arg Ser Leu
20 25

<210> 424
<211> 29
<212> PRT
<213> Homo sapiens

<400> 424
Ser Met Leu Ala Leu Leu Leu Gly Arg Thr Trp Pro Leu Phe Ser Val
1 5 10 15

Phe Tyr Gln Tyr Leu Glu Gln Ser Lys Tyr Arg Val Met
20 25

<210> 425
<211> 27
<212> PRT
<213> Homo sapiens

<400> 425
Phe Ser Arg Thr Val His Ala Asp Leu Ser Asn Tyr Asp Glu Asp Gly
1 5 10 15

Ala Trp Pro Val Leu Leu Asp Glu Phe Val Glu
20 25

<210> 426
<211> 10
<212> PRT
<213> Homo sapiens

<400> 426
Ile Tyr Arg Tyr Ala Phe Asp Phe Ala Arg
1 5 10

<210> 427
<211> 8
<212> PRT
<213> Homo sapiens

<400> 427
Lys Asp Gln Arg Ser Leu Asp Ile
1 5

<210> 428
<211> 8
<212> PRT
<213> Homo sapiens

<400> 428
Asn Val Leu Glu Phe Ser Arg Thr
1 5

<210> 429
<211> 21
<212> PRT
<213> Homo sapiens

<400> 429
Asp Leu Ser Asn Tyr Asp Glu Asp Gly Ala Trp Pro Val Leu Leu Asp
1 5 10 15

Glu Phe Val Glu Trp
20

<210> 430

<211> 37
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 430
Leu Phe Arg Cys Pro Ile Gly Lys Ala Gly Thr Pro Ala Gly Xaa Gly
1 5 10 15

Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Val Arg Glu Lys Glu Leu
20 25 30

Thr Glu Thr Phe Glu
35

<210> 431
<211> 21
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 431
Gly Lys Ala Gly Thr Pro Ala Gly Xaa Gly Pro Glu Phe Pro Gly Arg
1 5 10 15

Pro Thr Arg Pro Val
20

<210> 432
<211> 45
<212> PRT
<213> Homo sapiens

<400> 432
Phe Phe Val Phe Pro Tyr Pro Tyr Pro Phe Arg Pro Leu Pro Pro Ile
1 5 10 15

Pro Phe Pro Arg Phe Pro Trp Phe Arg Arg Asn Phe Pro Ile Pro Ile
20 25 30

Pro Glu Ser Ala Pro Thr Thr Pro Leu Pro Ser Glu Lys
35 40 45

<210> 433
<211> 21
<212> PRT

<213> Homo sapiens

<400> 433
Pro Trp Phe Arg Arg Asn Phe Pro Ile Pro Ile Pro Glu Ser Ala Pro
1 5 10 15

Thr Thr Pro Leu Pro
20

<210> 434
<211> 61
<212> PRT
<213> Homo sapiens

<400> 434
Phe Tyr Pro Pro Met Thr Gln Gly Lys Glu Ser Leu Pro Leu Leu Ala
1 5 10 15

Leu Gln Ile Phe Asn Thr Thr Phe Arg Pro Ser Phe Ala Phe Phe Ser
20 25 30

Gly His Arg Thr Leu Phe Phe Gly Val Arg Ser Pro Asn Pro Pro Lys
35 40 45

Pro Arg Ile Phe Leu Ile Trp Leu Ile Ala Val Ala Leu
50 55 60

<210> 435
<211> 31
<212> PRT
<213> Homo sapiens

<400> 435
Leu Leu Ala Leu Gln Ile Phe Asn Thr Thr Phe Arg Pro Ser Phe Ala
1 5 10 15

Phe Phe Ser Gly His Arg Thr Leu Phe Phe Gly Val Arg Ser Pro
20 25 30

<210> 436
<211> 52
<212> PRT
<213> Homo sapiens

<400> 436
His Leu Ala Gln Thr Val Met Met His Pro Gln Lys Ser Phe Tyr Gln
1 5 10 15

Val Lys Asn Thr Asn His Ser Asp Arg Gly Ala Ile Glu Glu Thr Gln
20 25 30

Ile Leu Glu Asp Arg Leu Gly Gln Ile Pro Leu Cys Leu Glu Ser Gln
35 40 45

Ile Trp Glu Ala
50

<210> 437
<211> 28
<212> PRT
<213> Homo sapiens

<400> 437
Lys Asn Thr Asn His Ser Asp Arg Gly Ala Ile Glu Glu Thr Gln Ile
1 5 10 15

Leu Glu Asp Arg Leu Gly Gln Ile Pro Leu Cys Leu
20 25

<210> 438
<211> 73
<212> PRT
<213> Homo sapiens

<400> 438
Gln Gly Cys Tyr Arg Arg Asp Ser Asn Ile Gly Arg Gln Val Arg Pro
1 5 10 15

Asp Ser Ile Met Leu Arg Lys Pro Asp Leu Gly Ser Ile Thr His Tyr
20 25 30

Gly Ser Val Leu Gly Asn Leu Asn Tyr Cys Asp Leu Pro Gln Leu Tyr
35 40 45

Arg Asn Pro Ser Leu Gly Asn Ser Gly Met Arg Glu Met Phe Ser Pro
50 55 60

Phe Tyr Asn Pro Val Glu Cys His Pro
65 70

<210> 439
<211> 23
<212> PRT
<213> Homo sapiens

<400> 439
Pro Asp Ser Ile Met Leu Arg Lys Pro Asp Leu Gly Ser Ile Thr His
1 5 10 15

Tyr Gly Ser Val Leu Gly Asn
20

<210> 440
<211> 22
<212> PRT
<213> Homo sapiens

<400> 440
Tyr Arg Asn Pro Ser Leu Gly Asn Ser Gly Met Arg Glu Met Phe Ser
1 5 10 15

Pro Phe Tyr Asn Pro Val
20

<210> 441
<211> 21
<212> PRT
<213> Homo sapiens

<400> 441
Asn Ser Ala Arg Gly Leu Ser Gly Gly His Pro Phe Pro Trp Leu Ser
1 5 10 15

Glu Gly His Pro Phe
20

<210> 442
<211> 107
<212> PRT
<213> Homo sapiens

<400> 442
Thr Asp Ser Asp Leu Thr Leu Gly Ile Leu Leu Leu Gly Ile Tyr Thr
1 5 10 15

Asn His Ile Trp Glu Met Phe Leu Ala Ala Ser Arg Ile Asn Ser Pro
20 25 30

Lys Leu Glu Pro Glu Lys Ser Val Lys Arg Gln Ile Asn Phe Pro Ser
35 40 45

Ser Lys Asp Val Gly Cys Ser Leu Glu Val Pro Lys Asp Gly Pro Pro
50 55 60

Leu Ser His Gly Lys Glu Trp Ile Pro Leu Ser His Arg Lys Gly Trp
65 70 75 80

Ile Pro Leu Ser His Met Lys Gly Trp Pro Ser Leu Ser His Gly Lys
85 90 95

Gly Trp Pro Pro Leu Ser Pro Arg Ala Glu Phe
100 105

<210> 443
<211> 20
<212> PRT
<213> Homo sapiens

<400> 443
Leu Gly Ile Leu Leu Leu Gly Ile Tyr Thr Asn His Ile Trp Glu Met
1 5 10 15

Phe Leu Ala Ala
20

<210> 444
<211> 27
<212> PRT
<213> Homo sapiens

<400> 444
Lys Ser Val Lys Arg Gln Ile Asn Phe Pro Ser Ser Lys Asp Val Gly
1 5 10 15

Cys Ser Leu Glu Val Pro Lys Asp Gly Pro Pro
20 25

<210> 445
<211> 27
<212> PRT
<213> Homo sapiens

<400> 445
Gly Lys Glu Trp Ile Pro Leu Ser His Arg Lys Gly Trp Ile Pro Leu
1 5 10 15

Ser His Met Lys Gly Trp Pro Ser Leu Ser His
20 25

<210> 446
<211> 47
<212> PRT
<213> Homo sapiens

<400> 446
Gly Trp Ala Ser Thr Gln Pro Arg Glu Arg Met Asp Pro Ala Gln Pro
1 5 10 15

Gln Glu Arg Met Asp Pro Ser Gln Pro His Glu Arg Met Ala Leu Thr
20 25 30

Gln Pro Trp Lys Arg Met Ala Pro Thr Gln Pro Ser Cys Arg Ile
35 40 45

<210> 447
<211> 24
<212> PRT
<213> Homo sapiens

<400> 447
Pro Ala Gln Pro Gln Glu Arg Met Asp Pro Ser Gln Pro His Glu Arg
1 5 10 15

Met Ala Leu Thr Gln Pro Trp Lys

20

<210> 448
<211> 30
<212> PRT
<213> Homo sapiens

<400> 448
Ile Ala Asn Gly Gly Gly Arg Pro Ile Lys Leu Asn Ala Leu Tyr Lys
1 5 10 15

Ile Gln Asn Glu Cys Lys Ile Val Phe Thr Cys Ile Asp Phe
20 25 30

<210> 449
<211> 33
<212> PRT
<213> Homo sapiens

<400> 449
Met Pro Cys Ile Lys Ser Lys Met Asn Ala Lys Leu Phe Ser Leu Val
1 5 10 15

Leu Thr Leu Cys Cys Met Ile Pro Ile Ser Val Leu Phe Gly Thr Cys
20 25 30

Ile

<210> 450
<211> 101
<212> PRT
<213> Homo sapiens

<400> 450
Gln Val Ala Met Gly Ser Leu Ser Gly Leu Arg Leu Ala Ala Gly Ser
1 5 10 15

Cys Phe Arg Leu Cys Glu Arg Asp Val Ser Ser Ser Leu Arg Leu Thr
20 25 30

Arg Ser Ser Asp Leu Lys Arg Ile Asn Gly Phe Cys Thr Lys Pro Gln
35 40 45

Glu Ser Pro Gly Ala Pro Ser Arg Thr Tyr Asn Arg Val Pro Leu His
50 55 60

Lys Pro Thr Asp Trp Gln Lys Lys Ile Leu Ile Trp Ser Gly Arg Phe
65 70 75 80

Lys Lys Glu Asp Glu Ile Pro Glu Thr Val Ser Leu Glu Met Leu Asp
85 90 95

Ala Ala Lys Asn Lys

210

100

<210> 451
<211> 25
<212> PRT
<213> Homo sapiens

<400> 451
Gly Leu Arg Leu Ala Ala Gly Ser Cys Phe Arg Leu Cys Glu Arg Asp
1 5 10 15

Val Ser Ser Ser Leu Arg Leu Thr Arg
20 25

<210> 452
<211> 20
<212> PRT
<213> Homo sapiens

<400> 452
Ala Pro Ser Arg Thr Tyr Asn Arg Val Pro Leu His Lys Pro Thr Asp
1 5 10 15

Trp Gln Lys Lys
20

<210> 453
<211> 23
<212> PRT
<213> Homo sapiens

<400> 453
Ile Trp Ser Gly Arg Phe Lys Lys Glu Asp Glu Ile Pro Glu Thr Val
1 5 10 15

Ser Leu Glu Met Leu Asp Ala
20

<210> 454
<211> 63
<212> PRT
<213> Homo sapiens

<400> 454
Met Asp Phe Ala Gln Asn His Arg Lys Val Pro Glu Leu His Pro Ala
1 5 10 15

Leu Thr Thr Glu Cys Leu Tyr Thr Asn Leu Arg Ile Gly Arg Lys Arg
20 25 30

Ser Ser Tyr Gly Gln Val Ala Ser Lys Arg Lys Met Lys Ser Gln Arg
35 40 45

Leu Ser Arg Trp Arg Cys Leu Met Leu Gln Arg Thr Arg Cys Glu
50 55 60

<210> 455
<211> 19
<212> PRT
<213> Homo sapiens

<400> 455
Lys Val Pro Glu Leu His Pro Ala Leu Thr Thr Glu Cys Leu Tyr Thr
1 5 10 15

Asn Leu Arg

<210> 456
<211> 26
<212> PRT
<213> Homo sapiens

<400> 456
Lys Arg Ser Ser Tyr Gly Gln Val Ala Ser Lys Arg Lys Met Lys Ser
1 5 10 15

Gln Arg Leu Ser Arg Trp Arg Cys Leu Met
20 25

<210> 457
<211> 12
<212> PRT
<213> Homo sapiens

<400> 457
Ile Asn Gly Phe Cys Thr Lys Pro Gln Glu Ser Pro
1 5 10

<210> 458
<211> 9
<212> PRT
<213> Homo sapiens

<400> 458
Arg Val Pro Leu His Lys Pro Thr Asp
1 5

<210> 459
<211> 8
<212> PRT
<213> Homo sapiens

<400> 459
Trp Ser Gly Arg Phe Lys Lys Glu

1 5

<210> 460
<211> 9
<212> PRT
<213> Homo sapiens

<400> 460
Glu Met Leu Asp Ala Ala Lys Asn Lys
1 5

<210> 461
<211> 9
<212> PRT
<213> Homo sapiens

<400> 461
Ser Tyr Leu Met Ile Ala Leu Thr Val
1 5

<210> 462
<211> 9
<212> PRT
<213> Homo sapiens

<400> 462
Met Val Ile Glu Gly Lys Lys Ala Ala
1 5

<210> 463
<211> 68
<212> PRT
<213> Homo sapiens

<400> 463
Arg Pro Gly Met Arg Ala Leu Gly Ser Cys Leu Ser Leu Leu Ala Leu
1 5 10 15

Cys Ser Pro Gln Ala Arg Pro Gly Pro Arg Thr Leu Asp Ala Ser Thr
20 25 30

Ala Thr Leu Thr Pro His Phe Ser Pro Cys Ala Arg Phe Ser Pro Val
35 40 45

Gly Pro Ser Ala Val Pro Phe Ala Ala Thr Pro Leu Pro Leu Ala Gly
50 55 60

Pro His Gln Pro
65

<210> 464
<211> 20

<212> PRT
<213> Homo sapiens

<400> 464
Gly Ser Cys Leu Ser Leu Leu Ala Leu Cys Ser Pro Gln Ala Arg Pro
1 5 10 15

Gly Pro Arg Thr
20

<210> 465
<211> 23
<212> PRT
<213> Homo sapiens

<400> 465
His Phe Ser Pro Cys Ala Arg Phe Ser Pro Val Gly Pro Ser Ala Val
1 5 10 15

Pro Phe Ala Ala Thr Pro Leu
20

<210> 466
<211> 92
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 466
Ala Ile Glu Glu Arg Asn Lys Ser Arg Leu Thr Gln Gln Ala Ser Glu
1 5 10 15

Pro Thr Gly Ser Pro Arg Tyr Leu His Glu Gln His Pro Gly Ser Arg
20 25 30

Ser Gln Met Asp Cys Gly Ser Leu Thr Met Xaa Cys Pro Pro Pro Arg
35 40 45

Val Arg Asp Asp Arg Thr Ser Ala Arg Gly Val Pro Arg Gln Ala Ala
50 55 60

Pro Asp Ile Val Gly Gly Arg Pro Ser Ser Arg Ala Cys Val Ser Xaa
65 70 75 80

Pro Ala Cys Ala Pro Ser Ala Ala Val Phe Pro Tyr
85 90

<210> 467
<211> 24
<212> PRT
<213> Homo sapiens

<400> 467
Leu Thr Gln Gln Ala Ser Glu Pro Thr Gly Ser Pro Arg Tyr Leu His
1 5 10 15

Glu Gln His Pro Gly Ser Arg Ser
20

<210> 468
<211> 25
<212> PRT
<213> Homo sapiens

<400> 468
Ser Ala Arg Gly Val Pro Arg Gln Ala Ala Pro Asp Ile Val Gly Gly
1 5 10 15

Arg Pro Ser Ser Arg Ala Cys Val Ser
20 25

<210> 469
<211> 14
<212> PRT
<213> Homo sapiens

<400> 469
Pro Arg Val Arg Lys Thr Pro His Leu Ser Ala Ser Gly Lys
1 5 10

<210> 470
<211> 59
<212> PRT
<213> Homo sapiens

<400> 470
Tyr Tyr Tyr Ser Met Leu Lys Ile Cys His Ile Thr Ile Leu Glu Thr
1 5 10 15

Leu Ser Asp Arg Thr Pro Arg Lys Phe Ala Lys Lys Cys Tyr Ile Leu
20 25 30

Tyr Ile Lys Leu Ser Asp Ser Ser Val Glu Lys Val Ala Tyr Thr Leu
35 40 45

Leu Leu Leu Ile Pro Ala Ala Ile Glu Lys Lys
50 55

<210> 471
<211> 32
<212> PRT
<213> Homo sapiens

<400> 471
Thr Ile Leu Glu Thr Leu Ser Asp Arg Thr Pro Arg Lys Phe Ala Lys
1 5 10 15

Lys Cys Tyr Ile Leu Tyr Ile Lys Leu Ser Asp Ser Ser Val Glu Lys
20 25 30

<210> 472
<211> 17
<212> PRT
<213> Homo sapiens

<400> 472
Val His Thr Lys Glu Ile Phe Arg Glu Arg Ser Ala Gly Phe Pro Val
1 5 10 15

Lys

<210> 473
<211> 97
<212> PRT
<213> Homo sapiens

<400> 473
Leu Glu Met Gly Phe Gln Pro Thr Lys Glu Ile Asn Ala Arg Gly Ser
1 5 10 15

Glu Pro Cys Gln Ala Gln Ser Thr Ser Leu Pro Lys Leu Pro Arg Trp
20 25 30

Gly Ser Arg Pro Glu Ala Pro Gln Thr Pro Gln Gly Gly Leu Glu Ser
35 40 45

Arg Cys Cys Thr Pro Val Ser Lys Gln Ser Leu Asn Leu Lys Ala Asp
50 55 60

Arg Phe Lys Ala Leu Thr Leu Gly Arg Ala Gln Trp Leu Thr Pro Val
65 70 75 80

Ile Gln Ala Leu Ser Glu Leu Arg Trp Val Asp His Leu Arg Ser Gly
85 90 95

Val

<210> 474
<211> 24
<212> PRT
<213> Homo sapiens

<400> 474
Phe Gln Pro Thr Lys Glu Ile Asn Ala Arg Gly Ser Glu Pro Cys Gln
1 5 10 15

Ala Gln Ser Thr Ser Leu Pro Lys
20

<210> 475
<211> 27
<212> PRT
<213> Homo sapiens

<400> 475
Pro Lys Leu Pro Arg Trp Gly Ser Arg Pro Glu Ala Pro Gln Thr Pro
1 5 10 15

Gln Gly Gly Leu Glu Ser Arg Cys Cys Thr Pro
20 25

<210> 476
<211> 27
<212> PRT
<213> Homo sapiens

<400> 476
Arg Phe Lys Ala Leu Thr Leu Gly Arg Ala Gln Trp Leu Thr Pro Val
1 5 10 15

Ile Gln Ala Leu Ser Glu Leu Arg Trp Val Asp
20 25

<210> 477
<211> 176
<212> PRT
<213> Homo sapiens

<400> 477
Arg Ile Pro Leu Gln Ser Asp Gly Ser Phe Leu His Glu Lys Ser Ser
1 5 10 15

Gln Gln Arg Ser Asn Arg Asn Phe Pro Cys Pro Thr Leu Gln Cys Asn
20 25 30

Pro Glu Val Ser Phe Trp Phe Val Val Thr Asp Pro Ser Lys Asn His
35 40 45

Thr Leu Pro Ala Val Glu Val Gln Ser Ala Ile Arg Met Asn Lys Asn
50 55 60

Arg Ile Asn Asn Ala Phe Phe Leu Asn Asp Gln Thr Leu Glu Phe Leu
65 70 75 80

Lys Ile Pro Ser Thr Leu Ala Pro Pro Met Asp Pro Ser Val Pro Ile
85 90 95

Trp Ile Ile Ile Phe Gly Val Ile Phe Cys Ile Ile Ile Val Ala Ile
100 105 110

Ala Leu Leu Ile Leu Ser Gly Ile Trp Gln Arg Arg Arg Lys Asn Lys
115 120 125

Glu Pro Ser Glu Val Asp Asp Ala Glu Asp Lys Cys Glu Asn Met Ile
130 135 140

Thr Ile Glu Asn Gly Ile Pro Ser Asp Pro Leu Asp Met Lys Gly Gly
145 150 155 160

His Ile Asn Asp Ala Phe Met Thr Glu Asp Glu Arg Leu Thr Pro Leu
165 170 175

<210> 478
<211> 25
<212> PRT
<213> Homo sapiens

<400> 478
Pro Cys Pro Thr Leu Gln Cys Asn Pro Glu Val Ser Phe Trp Phe Val
1 5 10 15

Val Thr Asp Pro Ser Lys Asn His Thr
20 25

<210> 479
<211> 23
<212> PRT
<213> Homo sapiens

<400> 479
Ala Ile Arg Met Asn Lys Asn Arg Ile Asn Asn Ala Phe Phe Leu Asn
1 5 10 15

Asp Gln Thr Leu Glu Phe Leu
20

<210> 480
<211> 24
<212> PRT
<213> Homo sapiens

<400> 480

Ile Trp Gln Arg Arg Arg Lys Asn Lys Glu Pro Ser Glu Val Asp Asp
1 5 10 15

Ala Glu Asp Lys Cys Glu Asn Met
20

<210> 481
<211> 19
<212> PRT
<213> Homo sapiens

<400> 481
Pro Leu Asp Met Lys Gly Gly His Ile Asn Asp Ala Phe Met Thr Glu
1 5 10 15

Asp Glu Arg

<210> 482
<211> 136
<212> PRT
<213> Homo sapiens

<400> 482
Gly Ser Arg Thr Thr Ala Leu Gln Arg Gly Val Ser Leu Ser Ser Ser
1 5 10 15

Val Met Lys Ala Ser Leu Ile Cys Pro Pro Phe Met Ser Arg Gly Ser
20 25 30

Glu Gly Met Pro Phe Ser Ile Val Ile Met Phe Ser His Leu Ser Ser
35 40 45

Ala Ser Ser Thr Ser Asp Gly Ser Leu Phe Phe Leu Leu Arg Cys Gln
50 55 60

Ile Pro Asp Lys Ile Ser Ser Ala Ile Ala Thr Met Met Met Gln Asn
65 70 75 80

Ile Thr Pro Asn Ile Ile Ile Gln Met Gly Thr Asp Gly Ser Met Gly
85 90 95

Gly Ala Ser Val Glu Gly Ile Phe Lys Asn Ser Arg Val Trp Ser Phe
100 105 110

Arg Lys Lys Ala Leu Leu Ile Arg Phe Leu Phe Ile Leu Met Ala Asp
115 120 125

Cys Thr Ser Thr Ala Gly Arg Val
130 135

<210> 483
<211> 28
<212> PRT

<213> Homo sapiens

<400> 483
Val Ser Leu Ser Ser Ser Val Met Lys Ala Ser Leu Ile Cys Pro Pro
1 5 10 15

Phe Met Ser Arg Gly Ser Glu Gly Met Pro Phe Ser
20 25

<210> 484
<211> 24
<212> PRT
<213> Homo sapiens

<400> 484
Ser Met Gly Gly Ala Ser Val Glu Gly Ile Phe Lys Asn Ser Arg Val
1 5 10 15

Trp Ser Phe Arg Lys Lys Ala Leu
20

<210> 485
<211> 29
<212> PRT
<213> Homo sapiens

<400> 485
Gly Ala Arg Gly Ser Gln Gln Asp Ala Pro Ala Leu Gln Glu Ala Glu
1 5 10 15

Val Arg Gly Pro Glu Arg Ala Gln Pro Ala Arg Gly Arg
20 25

<210> 486
<211> 439
<212> PRT
<213> Homo sapiens

<400> 486
Ser Glu Arg Pro Gly Glu Gly Pro Ala Arg Pro Gly Gln Asp Asp Gln
1 5 10 15

Gly Pro Ala Val Pro Ala Val Ala Gly Ala Gly Val Gly Val His Asp
20 25 30

Pro Ala Asp His Arg Val Leu Gly Gln Arg Ser Ala Ala His Phe Tyr
35 40 45

Leu His Thr Ser Phe Ser Arg Pro His Thr Gly Pro Pro Leu Pro Thr
50 55 60

Pro Gly Pro Asp Arg Thr Gly Ser Ser Arg Pro Thr Pro Met Ser Thr
65 70 75 80

220

Ser Phe Trp Thr Ile Ser His Ala Gly Val Lys Gln Ser Asp Leu Pro
85 90 95

Arg Lys Glu Thr Glu Gln Pro Pro Ala Pro Gly Glu His Gly Gly Glu
100 105 110

Arg Glu Arg Leu Arg Leu Val Pro Ala Arg Arg Pro Ala Gln Pro Arg
115 120 125

Pro Gly Pro Ala Ala Gly Gly Ala Glu Glu Arg Ala Ala Gly Leu Leu
130 135 140

Arg Gln Leu Gln Pro Gly Leu Pro His Gln Gly Ala Arg Ile Arg Arg
145 150 155 160

His Pro Gln Leu Gly Ala Glu Pro Pro Asp Arg Gly Arg Pro Ala Arg
165 170 175

Gly His Leu Leu Leu Arg Ala Gln Gly Gly Leu His Gln Leu Glu Ala
180 185 190

Arg Asp Asp Arg Ala Glu Arg Lys Pro Ala Ala Pro Arg Cys Ala Leu
195 200 205

Pro Arg Pro Ala Ala His Pro Ala Arg Ala Arg Ala Gln Arg Gln Arg
210 215 220

Ala Pro Asp Leu Gln Gln Val Leu Ala Pro Leu Arg Glu Ala Leu Pro
225 230 235 240

Pro Pro His Glu Gly Gln Ala Gln Glu Val His Gln Val Pro Leu Arg
245 250 255

Ala Arg Pro Leu Arg Ala Pro Asp Leu Arg Leu Pro Gln Gln Val Arg
260 265 270

Ala Gly Glu Arg Gly Val Leu Pro Gln Val Arg Arg Ala His Ala Ala
275 280 285

Gly Val Arg Gln Pro His Gln Pro Ala Arg Leu Gly Ala Arg Gly Leu
290 295 300

Pro Arg Trp Pro Gln Gly Val Leu Arg Gln Leu His Pro Val Pro Ala
305 310 315 320

Gly Pro Ala His Gly Glu Ala Gly Ala Leu Gln Arg Ala Leu Ala Ala
325 330 335

Gly Val Pro Pro Leu Pro Pro Val Pro Asp Arg Leu Arg Phe Leu Gly
340 345 350

Lys Leu Glu Thr Leu Asp Glu Asp Ala Ala Gln Leu Leu Gln Leu Leu
355 360 365

Gln Val Asp Arg Gln Ser Ala Ser Pro Arg Ala Thr Gly Thr Gly Pro
370 375 380

Pro Ala Ala Gly Arg Arg Thr Gly Ser Pro Arg Ser Pro Trp Pro Gly
385 390 395 400

Gly Ser Ser Cys Ile Asn Ser Thr Arg Pro Thr Leu Phe Ser Ser Ala
405 410 415

Thr Pro Ser Pro Lys Thr Ser Ser Glu Thr Glu Ser Phe Arg Val Ala
420 425 430

Phe Ser Arg Val Pro Gly Thr
435

<210> 487
<211> 25
<212> PRT
<213> Homo sapiens

<400> 487
Arg Pro Gly Gln Asp Asp Gln Gly Pro Ala Val Pro Ala Val Ala Gly
1 5 10 15

Ala Gly Val Gly Val His Asp Pro Ala
20 25

<210> 488
<211> 21
<212> PRT
<213> Homo sapiens

<400> 488
Ser Arg Pro His Thr Gly Pro Pro Leu Pro Thr Pro Gly Pro Asp Arg
1 5 10 15

Thr Gly Ser Ser Arg
20

<210> 489
<211> 23
<212> PRT
<213> Homo sapiens

<400> 489
Ser His Ala Gly Val Lys Gln Ser Asp Leu Pro Arg Lys Glu Thr Glu
1 5 10 15

Gln Pro Pro Ala Pro Gly Glu
20

<210> 490
<211> 23
<212> PRT
<213> Homo sapiens

<400> 490
Arg Arg Pro Ala Gln Pro Arg Pro Gly Pro Ala Ala Gly Gly Ala Glu
1 5 10 15

Glu Arg Ala Ala Gly Leu Leu
20

<210> 491
<211> 23
<212> PRT
<213> Homo sapiens

<400> 491
Arg Arg His Pro Gln Leu Gly Ala Glu Pro Pro Asp Arg Gly Arg Pro
1 5 10 15

Ala Arg Gly His Leu Leu Leu
20

<210> 492
<211> 25
<212> PRT
<213> Homo sapiens

<400> 492
Arg Asp Asp Arg Ala Glu Arg Lys Pro Ala Ala Pro Arg Cys Ala Leu
1 5 10 15

Pro Arg Pro Ala Ala His Pro Ala Arg
20 25

<210> 493
<211> 27
<212> PRT
<213> Homo sapiens

<400> 493
Arg Ala Pro Asp Leu Gln Gln Val Leu Ala Pro Leu Arg Glu Ala Leu
1 5 10 15

Pro Pro Pro His Glu Gly Gln Ala Gln Glu Val
20 25

<210> 494
<211> 26
<212> PRT
<213> Homo sapiens

<400> 494
Asp Leu Arg Leu Pro Gln Gln Val Arg Ala Gly Glu Arg Gly Val Leu
1 5 10 15

Pro Gln Val Arg Arg Ala His Ala Ala Gly

20 25

<210> 495
<211> 27
<212> PRT
<213> Homo sapiens

<400> 495
Gln Pro Ala Arg Leu Gly Ala Arg Gly Leu Pro Arg Trp Pro Gln Gly
1 5 10 15

Val Leu Arg Gln Leu His Pro Val Pro Ala Gly
20 25

<210> 496
<211> 24
<212> PRT
<213> Homo sapiens

<400> 496
Ala Gly Val Pro Pro Leu Pro Pro Val Pro Asp Arg Leu Arg Phe Leu
1 5 10 15

Gly Lys Leu Glu Thr Leu Asp Glu
20

<210> 497
<211> 25
<212> PRT
<213> Homo sapiens

<400> 497
Gln Leu Leu Gln Leu Leu Gln Val Asp Arg Gln Ser Ala Ser Pro Arg
1 5 10 15

Ala Thr Gly Thr Gly Pro Pro Ala Ala
20 25

<210> 498
<211> 25
<212> PRT
<213> Homo sapiens

<400> 498
Asn Ser Thr Arg Pro Thr Leu Phe Ser Ser Ala Thr Pro Ser Pro Lys
1 5 10 15

Thr Ser Ser Glu Thr Glu Ser Phe Arg
20 25

<210> 499
<211> 324

<212> PRT
<213> Homo sapiens

<400> 499

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Leu Gly Gly Lys Arg Thr Ala Gly Pro Pro Gly Val Ala Ala Ala Ala
  1               5                  10                  15

Ala Arg Arg Pro Arg Pro Glu Ser Pro Ala Ser Pro Gly Ile Val Val
             20                  25                  30

Asp Leu Ala Arg Val Ala Glu Ala Val His Leu Pro Pro Val Leu Val
         35                  40                  45

Glu Gly Arg Gln Leu Leu Arg Val Arg Val Gln Gln Val Leu Asp Glu
     50                  55                  60

Val Gly Glu Gly His Leu Glu Ala Ser Ala Glu Gly Leu Ala Arg Arg
 65                  70                  75                  80

Gly Gly Gln Ala Gly Val Val Gly Val His Pro Gln His Gly His Gly
                 85                  90                  95

Glu Leu Ala Val Glu Leu Leu Val Leu Gln Leu Glu Leu Ala Ala Glu
            100                 105                 110

Gly Gly Asp Gln Ala His Glu Gly Val Ala His Glu Glu Glu Leu Gly
        115                 120                 125

Val Leu Leu Glu Leu Asp Leu His Glu Val Ala Gly Glu Leu Pro Val
    130                 135                 140

Ala Ala Pro Glu Leu Val Glu Gly Gln Val Arg Ala Gly Val Val His
145                 150                 155                 160

Val Leu Ala Arg Asp Ala Gln Arg Val Ala Val Gly Arg Thr Ala Val
                165                 170                 175

Gln Gln Ala Ser Ala Gln His Asp His His Ala Leu Pro Val Gly Ala
            180                 185                 190

Gly His Leu Gly His Val Ala Val Asp Gly Pro Val Pro Val Val His
        195                 200                 205

Asp Gln Val Ala Gln Leu Arg Val Gly Asp Val Val Glu Cys Ala Leu
    210                 215                 220

Leu Gly Gly Glu Gly Gln Ala Gly Val Gly Ala Glu Ala Pro Gln His
225                 230                 235                 240

Val Pro Pro Leu Arg Leu Leu Pro Ala Leu Val Trp Ala Ala Pro Gly
                245                 250                 255

Val Ala Arg Gly Pro Val Val Ala Ser His Ala Leu Leu His Ala Pro
            260                 265                 270

Pro Ala Gln Ala Ala Ala Pro Ser Pro Phe Trp Glu Gly His Ser Ala
        275                 280                 285
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Ser Arg Gln His Glu Lys Leu Ser Arg Asn Ser Ser Thr Ser Glu Ser
290 295 300

Ala Val Ser Ser Leu Ser Cys Pro Ala Arg Ala Trp Ala Ala Ala Ala
305 310 315 320

Pro Cys Ala Ala

<210> 500
<211> 23
<212> PRT
<213> Homo sapiens

<400> 500
Glu Ala Val His Leu Pro Pro Val Leu Val Glu Gly Arg Gln Leu Leu
1 5 10 15

Arg Val Arg Val Gln Gln Val
20

<210> 501
<211> 24
<212> PRT
<213> Homo sapiens

<400> 501
Gly His Leu Glu Ala Ser Ala Glu Gly Leu Ala Arg Arg Gly Gly Gln
1 5 10 15

Ala Gly Val Val Gly Val His Pro
20

<210> 502
<211> 28
<212> PRT
<213> Homo sapiens

<400> 502
Gln Leu Glu Leu Ala Ala Glu Gly Gly Asp Gln Ala His Glu Gly Val
1 5 10 15

Ala His Glu Glu Glu Leu Gly Val Leu Leu Glu Leu
20 25

<210> 503
<211> 27
<212> PRT
<213> Homo sapiens

<400> 503
Gly Glu Leu Pro Val Ala Ala Pro Glu Leu Val Glu Gly Gln Val Arg

226

1 5 10 15

Ala Gly Val Val His Val Leu Ala Arg Asp Ala
20 25

<210> 504
<211> 25
<212> PRT
<213> Homo sapiens

<400> 504
Ala Val Gln Gln Ala Ser Ala Gln His Asp His His Ala Leu Pro Val
1 5 10 15

Gly Ala Gly His Leu Gly His Val Ala
20 25

<210> 505
<211> 25
<212> PRT
<213> Homo sapiens

<400> 505
His Asp Gln Val Ala Gln Leu Arg Val Gly Asp Val Val Glu Cys Ala
1 5 10 15

Leu Leu Gly Gly Glu Gly Gln Ala Gly
20 25

<210> 506
<211> 23
<212> PRT
<213> Homo sapiens

<400> 506
Ala Leu Val Trp Ala Ala Pro Gly Val Ala Arg Gly Pro Val Val Ala
1 5 10 15

Ser His Ala Leu Leu His Ala
20

<210> 507
<211> 28
<212> PRT
<213> Homo sapiens

<400> 507
Pro Pro Ala Gln Ala Ala Ala Pro Ser Pro Phe Trp Glu Gly His Ser
1 5 10 15

Ala Ser Arg Gln His Glu Lys Leu Ser Arg Asn Ser
20 25

<210> 508
<211> 314
<212> PRT
<213> Homo sapiens

<400> 508

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Ser Arg Val Thr Phe Pro Glu Arg Arg Arg Ser Ser Arg Leu Arg Arg
  1               5                  10                  15

Gly Ser Met Glu Glu Ser Val Arg Gly Tyr Asp Trp Ser Pro Arg Asp
             20                  25                  30

Ala Arg Arg Ser Pro Asp Gln Gly Arg Gln Gln Ala Glu Arg Arg Asn
         35                  40                  45

Val Leu Arg Gly Phe Cys Ala Asn Ser Ser Leu Ala Phe Pro Thr Lys
     50                  55                  60

Glu Arg Ala Phe Asp Asp Ile Pro Asn Ser Glu Leu Ser His Leu Ile
 65                  70                  75                  80

Val Asp Asp Arg His Gly Ala Ile Tyr Cys Tyr Val Pro Lys Val Ala
                 85                  90                  95

Cys Thr Asn Trp Lys Arg Val Met Ile Val Leu Ser Gly Ser Leu Leu
            100                 105                 110

His Arg Gly Ala Pro Tyr Arg Asp Pro Leu Arg Ile Pro Arg Glu His
        115                 120                 125

Val His Asn Ala Ser Ala His Leu Thr Phe Asn Lys Phe Trp Arg Arg
    130                 135                 140

Tyr Gly Lys Leu Ser Arg His Leu Met Lys Val Lys Leu Lys Lys Tyr
145                 150                 155                 160

Thr Lys Phe Leu Phe Val Arg Asp Pro Phe Val Arg Leu Ile Ser Ala
                165                 170                 175

Phe Arg Ser Lys Phe Glu Leu Glu Asn Glu Glu Phe Tyr Arg Lys Phe
            180                 185                 190

Ala Val Pro Met Leu Arg Val Tyr Ala Asn His Thr Ser Leu Pro Ala
        195                 200                 205

Ser Ala Arg Glu Ala Phe Arg Ala Gly Leu Lys Val Ser Phe Ala Asn
    210                 215                 220

Phe Ile Gln Tyr Leu Leu Asp Pro His Thr Glu Lys Leu Ala Pro Phe
225                 230                 235                 240

Asn Glu His Trp Arg Gln Val Tyr Arg Leu Cys His Pro Cys Gln Ile
                245                 250                 255

Asp Tyr Asp Ser Trp Gly Ser Trp Arg Leu Trp Thr Arg Thr Pro Arg
            260                 265                 270
```

Ser Cys Cys Ser Tyr Ser Arg Trp Thr Gly Ser Pro Leu Pro Pro Glu
275 280 285

Leu Pro Glu Gln Asp Arg Gln Gln Leu Gly Gly Gly Leu Val Arg Gln
290 295 300

Asp Pro Pro Gly Leu Glu Ala Ala Ala Val
305 310

<210> 509
<211> 26
<212> PRT
<213> Homo sapiens

<400> 509
Arg Ser Pro Asp Gln Gly Arg Gln Gln Ala Glu Arg Arg Asn Val Leu
1 5 10 15

Arg Gly Phe Cys Ala Asn Ser Ser Leu Ala
20 25

<210> 510
<211> 28
<212> PRT
<213> Homo sapiens

<400> 510
Thr Lys Glu Arg Ala Phe Asp Asp Ile Pro Asn Ser Glu Leu Ser His
1 5 10 15

Leu Ile Val Asp Asp Arg His Gly Ala Ile Tyr Cys
20 25

<210> 511
<211> 23
<212> PRT
<213> Homo sapiens

<400> 511
Phe Asn Lys Phe Trp Arg Arg Tyr Gly Lys Leu Ser Arg His Leu Met
1 5 10 15

Lys Val Lys Leu Lys Lys Tyr
20

<210> 512
<211> 24
<212> PRT
<213> Homo sapiens

<400> 512
Phe Val Arg Leu Ile Ser Ala Phe Arg Ser Lys Phe Glu Leu Glu Asn

1 5 10 15

Glu Glu Phe Tyr Arg Lys Phe Ala
20

<210> 513
<211> 26
<212> PRT
<213> Homo sapiens

<400> 513
Thr Ser Leu Pro Ala Ser Ala Arg Glu Ala Phe Arg Ala Gly Leu Lys
1 5 10 15

Val Ser Phe Ala Asn Phe Ile Gln Tyr Leu
20 25

<210> 514
<211> 25
<212> PRT
<213> Homo sapiens

<400> 514
Ser Tyr Ser Arg Trp Thr Gly Ser Pro Leu Pro Pro Glu Leu Pro Glu
1 5 10 15

Gln Asp Arg Gln Gln Leu Gly Gly Gly
20 25

<210> 515
<211> 6
<212> PRT
<213> Homo sapiens

<400> 515
Ser Thr Gly Cys Ser Glu
1 5

<210> 516
<211> 146
<212> PRT
<213> Homo sapiens

<400> 516
Cys Leu Cys Leu Gly Cys Gly Leu Pro Glu Leu His Ser Tyr Leu Asp
1 5 10 15

Pro Gly Pro Tyr Leu Leu Val Tyr Pro Thr Leu Phe Trp Leu Cys Pro
20 25 30

Ser Ala Val Ser Pro Trp Ala Tyr Thr Cys Tyr Gln Leu Gly Leu Gly
35 40 45

230

Pro Gln Trp Gly Ala Ala Ala Leu Ser Phe Thr Val Asp Ala Ala Ile
50 55 60

Arg Val Trp Asp Val Ser Thr Glu Thr Cys Val Pro Leu Pro Trp Phe
65 70 75 80

Arg Gly Gly Gly Val Thr Asn Cys Ser Gly Pro Gln Thr Ala Ala Lys
85 90 95

Ser Trp Leu Pro Leu Leu Gln Leu Ser Phe Glu Ser Gly Arg Pro Arg
100 105 110

Cys Gly Leu Val Arg Gly Gly Leu Leu Tyr Gln Gly Ala Val Arg Leu
115 120 125

Ala Ala Gly Ala Gln Met Ala Ala Asp Cys Cys Ser Leu Tyr Trp Glu
130 135 140

Ser His
145

<210> 517
<211> 26
<212> PRT
<213> Homo sapiens

<400> 517
Tyr Pro Thr Leu Phe Trp Leu Cys Pro Ser Ala Val Ser Pro Trp Ala
1 5 10 15

Tyr Thr Cys Tyr Gln Leu Gly Leu Gly Pro
20 25

<210> 518
<211> 25
<212> PRT
<213> Homo sapiens

<400> 518
Asp Val Ser Thr Glu Thr Cys Val Pro Leu Pro Trp Phe Arg Gly Gly
1 5 10 15

Gly Val Thr Asn Cys Ser Gly Pro Gln
20 25

<210> 519
<211> 22
<212> PRT
<213> Homo sapiens

<400> 519
Leu Leu Tyr Gln Gly Ala Val Arg Leu Ala Ala Gly Ala Gln Met Ala
1 5 10 15

Ala Asp Cys Cys Ser Leu
20

<210> 520
<211> 155
<212> PRT
<213> Homo sapiens

<400> 520
Asn Lys Arg Lys Thr Tyr Leu Phe Leu Glu Val Gly Met Trp Gly Val
1 5 10 15

Gly Gln Asn Arg Trp Trp Pro Trp Glu Arg Val Pro Arg Gly Arg Gly
20 25 30

Trp Gly Cys Leu Ser Lys Glu Gly Gln Val Met Asn Arg Ala Ser Thr
35 40 45

Pro Ser Arg Gly Phe Leu Gly Pro Pro Lys His Trp Ala Lys Thr Trp
50 55 60

Lys Leu Gly Ile Asp Lys Val Gln Arg Asp Val Gly Asn Ser Ala Cys
65 70 75 80

Gly Pro Ala His Thr Glu Gln Gly Pro Phe Val Glu Gly Arg Trp Lys
85 90 95

Val Met Ser Trp Gly Trp Ala Pro Gly Ser Pro Trp Ile Met Pro Gln
100 105 110

Gly Arg Ser Ser Asn Thr Gly Leu Phe Arg Val Arg Lys Arg Arg Met
115 120 125

Thr Gly Leu Pro Ser Cys Thr Leu Gly Phe Pro Phe Ile Ser Thr Ala
130 135 140

Arg Arg Ser Pro Leu Gly Ser Gln Thr Met Glu
145 150 155

<210> 521
<211> 26
<212> PRT
<213> Homo sapiens

<400> 521
Gly Val Gly Gln Asn Arg Trp Trp Pro Trp Glu Arg Val Pro Arg Gly
1 5 10 15

Arg Gly Trp Gly Cys Leu Ser Lys Glu Gly
20 25

<210> 522
<211> 26
<212> PRT

<213> Homo sapiens

<400> 522
Ala Lys Thr Trp Lys Leu Gly Ile Asp Lys Val Gln Arg Asp Val Gly
1 5 10 15

Asn Ser Ala Cys Gly Pro Ala His Thr Glu
20 25

<210> 523
<211> 42
<212> PRT
<213> Homo sapiens

<400> 523
Trp Ala Pro Gly Ser Pro Trp Ile Met Pro Gln Gly Arg Ser Ser Asn
1 5 10 15

Thr Gly Leu Phe Arg Val Arg Lys Arg Arg Met Thr Gly Leu Pro Ser
20 25 30

Cys Thr Leu Gly Phe Pro Phe Ile Ser Thr
35 40

<210> 524
<211> 17
<212> PRT
<213> Homo sapiens

<400> 524
Ser Ser Tyr Gln Cys Pro Lys Val Thr Phe Phe Lys Ser Ser Val Asp
1 5 10 15

Thr

<210> 525
<211> 14
<212> PRT
<213> Homo sapiens

<400> 525
Tyr Ile Tyr Ser Tyr Leu Gly Phe Phe Asn Gln Ile Asn Lys
1 5 10

<210> 526
<211> 6
<212> PRT
<213> Homo sapiens

<400> 526
Ala Arg Asp Leu Ile Leu
1 5

<210> 527
<211> 43
<212> PRT
<213> Homo sapiens

<400> 527
Leu Thr Phe Tyr Leu Gln Phe Leu Ala Pro Lys Asp Lys Pro Ser Gly
1 5 10 15

Asp Thr Ala Ala Val Phe Glu Glu Gly Gly Asp Val Asp Asp Leu Val
20 25 30

Ser Thr Phe Asn Met His Leu Val Phe Cys Asp
35 40

<210> 528
<211> 25
<212> PRT
<213> Homo sapiens

<400> 528
Phe Leu Ala Pro Lys Asp Lys Pro Ser Gly Asp Thr Ala Ala Val Phe
1 5 10 15

Glu Glu Gly Gly Asp Val Asp Asp Leu
20 25

<210> 529
<211> 13
<212> PRT
<213> Homo sapiens

<400> 529
Ala Arg Ala Gly Ala Lys Ile Leu Phe Glu Gly Glu Phe
1 5 10

<210> 530
<211> 92
<212> PRT
<213> Homo sapiens

<400> 530
Asn Phe Glu Ile His Ser Ala Phe Pro Phe Met Leu Phe Val Ala Cys
1 5 10 15

Leu Leu His Ser Ser Cys Pro Arg Thr Ala Arg Phe Leu Ala Ser Pro
20 25 30

Leu Ser Glu Ser Asn Val Ile Phe Tyr Gln Asn Gln Tyr Gln Phe Pro
35 40 45

Cys Ile Leu Cys Phe Ile Glu Phe Ala Arg Leu Thr Ser Phe Lys His

50 55 60

Leu Ile His Ser Gln Ser His Leu Val Arg Leu Gln Tyr Glu Asp Phe
65 70 75 80

Ser Val Ser Ser Glu Ala Trp Asp Thr Glu Leu Thr
85 90

<210> 531
<211> 26
<212> PRT
<213> Homo sapiens

<400> 531
Phe Pro Phe Met Leu Phe Val Ala Cys Leu Leu His Ser Ser Cys Pro
1 5 10 15

Arg Thr Ala Arg Phe Leu Ala Ser Pro Leu
20 25

<210> 532
<211> 26
<212> PRT
<213> Homo sapiens

<400> 532
Asn Val Ile Phe Tyr Gln Asn Gln Tyr Gln Phe Pro Cys Ile Leu Cys
1 5 10 15

Phe Ile Glu Phe Ala Arg Leu Thr Ser Phe
20 25

<210> 533
<211> 23
<212> PRT
<213> Homo sapiens

<400> 533
Ser Gln Ser His Leu Val Arg Leu Gln Tyr Glu Asp Phe Ser Val Ser
1 5 10 15

Ser Glu Ala Trp Asp Thr Glu
20

<210> 534
<211> 10
<212> PRT
<213> Homo sapiens

<400> 534
Gln Lys Phe Leu Cys Ala Ser Asp Gly Asp
1 5 10

<210> 535
<211> 177
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (162)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 535
Ala Glu Val Pro Leu Arg Val Arg Arg Arg His Gly Arg Pro His Gly
1 5 10 15

Pro Gly Gly Arg Gln Leu Ala Leu Gly Ile Pro Ala Leu Arg Ser Leu
20 25 30

Pro Gly Cys Val Pro Arg His His Gly Cys Ser Pro Gly Tyr Gly Cys
35 40 45

Leu His Arg Arg Ile Leu Cys Leu Pro Leu Ile Leu Leu Leu Val Tyr
50 55 60

Lys Gln Arg Gln Ala Ala Ser Asn Arg Arg Ala Gln Glu Leu Val Arg
65 70 75 80

Met Asp Ser Asn Ile Gln Gly Ile Glu Asn Pro Gly Phe Glu Ala Ser
85 90 95

Pro Pro Ala Gln Gly Ile Pro Glu Ala Lys Val Arg His Pro Leu Ser
100 105 110

Tyr Val Ala Gln Arg Gln Pro Ser Glu Ser Gly Arg His Leu Leu Ser
115 120 125

Glu Pro Ser Thr Pro Leu Ser Pro Pro Gly Pro Gly Asp Val Phe Phe
130 135 140

Pro Ser Leu Asp Pro Val Pro Asp Ser Pro Asn Phe Glu Val Ile Xaa
145 150 155 160

Pro Xaa Trp Gly Thr Val Gly Cys Cys Gly Trp Val Trp Gly Arg Cys
165 170 175

Ile

<210> 536
<211> 27
<212> PRT

<213> Homo sapiens

<400> 536
Gly Pro Gly Gly Arg Gln Leu Ala Leu Gly Ile Pro Ala Leu Arg Ser
1 5 10 15

Leu Pro Gly Cys Val Pro Arg His His Gly Cys
20 25

<210> 537
<211> 25
<212> PRT
<213> Homo sapiens

<400> 537
Phe Glu Ala Ser Pro Pro Ala Gln Gly Ile Pro Glu Ala Lys Val Arg
1 5 10 15

His Pro Leu Ser Tyr Val Ala Gln Arg
20 25

<210> 538
<211> 88
<212> PRT
<213> Homo sapiens

<400> 538
Asp Met Ser Leu Gly Met Trp Gln His Gln Trp Asp Lys Met Asp Thr
1 5 10 15

Gly Pro Pro Ser Gln Ala Pro Asp Thr Gly His Gly Gly Glu Thr Ser
20 25 30

Pro Pro Trp His Ala Leu Gly Ser Pro Val Leu Pro Glu Ala Ala Leu
35 40 45

Leu Ser Asp Phe Leu Phe Val Pro Gln Trp Leu Trp Gly Gln Ala Cys
50 55 60

Leu Pro Thr Gly His Arg His Leu Pro Gln Leu Pro Pro Thr Ser Ser
65 70 75 80

Phe Ser Glu Asp Leu Ser Thr Gly
85

<210> 539
<211> 78
<212> PRT
<213> Homo sapiens

<400> 539
Pro Val Asp Arg Ser Ser Glu Lys Leu Leu Val Gly Gly Ser Trp Gly
1 5 10 15

```
Arg Trp Arg Trp Pro Val Gly Arg Gln Ala Trp Pro Gln Ser His Cys
             20                  25                  30

Gly Thr Lys Arg Lys Ser Asp Arg Arg Ala Ala Ser Gly Lys Thr Gly
         35                  40                  45

Glu Pro Ser Ala Cys His Gly Gly Glu Val Ser Pro Pro Cys Pro Val
     50                  55                  60

Ser Gly Ala Trp Glu Gly Gly Pro Val Ser Ile Leu Ser His
 65                  70                  75
```

<210> 540
<211> 22
<212> PRT
<213> Homo sapiens

<400> 540

```
Pro Val Asp Arg Ser Ser Glu Lys Leu Leu Val Gly Gly Ser Trp Gly
  1               5                  10                  15

Arg Trp Arg Trp Pro Val
             20
```

<210> 541
<211> 25
<212> PRT
<213> Homo sapiens

<400> 541

```
Thr Lys Arg Lys Ser Asp Arg Arg Ala Ala Ser Gly Lys Thr Gly Glu
  1               5                  10                  15

Pro Ser Ala Cys His Gly Gly Glu Val
             20                  25
```

<210> 542
<211> 46
<212> PRT
<213> Homo sapiens

<400> 542

```
Met Thr Ser Lys Phe Gly Glu Ser Gly Thr Gly Ser Arg Asp Gly Lys
  1               5                  10                  15

Lys Thr Ser Pro Gly Pro Gly Gly Asp Arg Gly Val Leu Gly Ser Glu
             20                  25                  30

Ser Arg Cys Arg Pro Asp Ser Glu Gly Cys Arg Trp Ala Thr
         35                  40                  45
```

<210> 543
<211> 20

<212> PRT
<213> Homo sapiens

<400> 543
Ser Pro Gly Pro Gly Gly Asp Arg Gly Val Leu Gly Ser Glu Ser Arg
1 5 10 15

Cys Arg Pro Asp
20

<210> 544
<211> 23
<212> PRT
<213> Homo sapiens

<400> 544
Pro Pro Ser Gln Ala Pro Asp Thr Gly His Gly Gly Glu Thr Ser Pro
1 5 10 15

Pro Trp His Ala Leu Gly Ser
20

<210> 545
<211> 15
<212> PRT
<213> Homo sapiens

<400> 545
His Glu Val Gln Pro Ser Tyr Leu Pro Ser Asn Ser Gly Leu Ile
1 5 10 15

<210> 546
<211> 22
<212> PRT
<213> Homo sapiens

<400> 546
Leu Arg Ile Ser Val Leu Cys Arg Glu Thr Ala Cys Asn Trp Ser His
1 5 10 15

His Pro Leu Asp Ser Asn
20

<210> 547
<211> 32
<212> PRT
<213> Homo sapiens

<400> 547
Leu Thr Val Thr Val Arg Asn Pro Gly Ser Thr His Ala Ser Gly Arg
1 5 10 15

Pro Arg Arg Arg Ser Gly Val Trp Ala Arg Arg Gly Leu Val Trp Gln

20 25 30

<210> 548
<211> 38
<212> PRT
<213> Homo sapiens

<400> 548
Thr Pro Cys Ser Ala Gln Phe Ser Val Leu Gly Pro Ser Gly Pro Ile
1 5 10 15

Leu Ala Met Val Gly Glu Asp Ala Asp Leu Pro Cys His Leu Phe Pro
20 25 30

Thr Met Ser Ala Glu Thr
35

<210> 549
<211> 60
<212> PRT
<213> Homo sapiens

<400> 549
Met Glu Leu Lys Trp Val Ser Ser Ser Leu Arg Gln Val Val Asn Val
1 5 10 15

Tyr Ala Asp Gly Lys Glu Val Glu Asp Arg Gln Ser Ala Pro Tyr Arg
20 25 30

Gly Arg Thr Ser Ile Leu Arg Asp Gly Ile Thr Ala Gly Lys Ala Ala
35 40 45

Leu Arg Ile His Asn Val Thr Ala Ser Asp Ser Gly
50 55 60

<210> 550
<211> 26
<212> PRT
<213> Homo sapiens

<400> 550
Leu Glu Val Lys Gly Tyr Glu Asp Gly Gly Ile His Leu Glu Cys Arg
1 5 10 15

Ser Thr Gly Trp Tyr Pro Gln Pro Gln Ile
20 25

<210> 551
<211> 80
<212> PRT

<213> Homo sapiens

<400> 551
Met Ala Ser Ser Leu Ala Phe Leu Leu Leu Asn Phe His Val Ser Leu
1 5 10 15

Leu Leu Val Gln Leu Leu Thr Pro Cys Ser Ala Gln Phe Ser Val Leu
20 25 30

Gly Pro Ser Gly Pro Ile Leu Ala Met Val Gly Glu Asp Ala Asp Leu
35 40 45

Pro Cys His Leu Phe Pro Thr Met Ser Ala Glu Thr Met Glu Leu Lys
50 55 60

Trp Val Ser Ser Ser Leu Arg Gln Val Val Asn Val Tyr Ala Asp Gly
65 70 75 80

<210> 552
<211> 103
<212> PRT
<213> Homo sapiens

<400> 552
Arg His Glu Leu Ser His Asn Arg Lys Asn Gly Glu Leu Leu Ile Asp
1 5 10 15

Arg Leu Tyr Ser Val Gly Ser Asp Ser Pro Met Gly Ile Pro Arg Asp
20 25 30

Ile Ile Phe Thr Asp Gly Phe Pro Tyr Trp Asn Pro Lys Val Lys Thr
35 40 45

Leu Lys Asp Arg His Phe Trp Gln Ser Ile Asp Glu Asn Gly Lys Phe
50 55 60

Pro Gly Phe Pro Ser Ala Gln Leu Ser Cys Leu Pro Pro Leu Gly Pro
65 70 75 80

Ala Ala His Ser Leu Leu Ser Ser Val Phe Cys Ala Trp Thr Leu Trp
85 90 95

Ala His Pro Gly His Gly Gly
100

<210> 553
<211> 24
<212> PRT
<213> Homo sapiens

<400> 553
Leu Leu Ile Asp Arg Leu Tyr Ser Val Gly Ser Asp Ser Pro Met Gly

241

```
  1               5                  10                  15

Ile Pro Arg Asp Ile Ile Phe Thr
             20
```

<210> 554
<211> 25
<212> PRT
<213> Homo sapiens

<400> 554

```
Asn Pro Lys Val Lys Thr Leu Lys Asp Arg His Phe Trp Gln Ser Ile
  1               5                  10                  15

Asp Glu Asn Gly Lys Phe Pro Gly Phe
             20                  25
```

<210> 555
<211> 24
<212> PRT
<213> Homo sapiens

<400> 555

```
Leu Gly Pro Ala Ala His Ser Leu Leu Ser Ser Val Phe Cys Ala Trp
  1               5                  10                  15

Thr Leu Trp Ala His Pro Gly His
             20
```

<210> 556
<211> 135
<212> PRT
<213> Homo sapiens

<400> 556

```
Arg Leu Gln His Trp Val Leu Ile Phe Thr Leu Glu Val Lys Gly Tyr
  1               5                  10                  15

Glu Asp Gly Gly Ile His Leu Glu Cys Arg Ser Thr Gly Trp Tyr Pro
             20                  25                  30

Gln Pro Gln Ile Gln Trp Ser Asn Ala Lys Gly Glu Asn Ile Pro Ala
         35                  40                  45

Val Glu Ala Pro Val Val Ala Asp Gly Val Gly Leu Tyr Glu Val Ala
     50                  55                  60

Ala Ser Val Ile Met Arg Gly Gly Ser Gly Glu Gly Val Ser Cys Ile
 65                  70                  75                  80

Ile Arg Asn Ser Leu Leu Gly Leu Glu Lys Thr Ala Ser Ile Ser Ile
                 85                  90                  95

Ala Asp Pro Ser Ser Gly Ala Pro Ser Pro Gly Ser Gln Pro Trp Gln
```

242

100 105 110

Gly Pro Cys Leu Ser Cys Cys Cys Phe Ser Pro Glu Pro Val Thr Ser
115 120 125

Cys Gly Asp Asn Arg Arg Lys
130 135

<210> 557
<211> 25
<212> PRT
<213> Homo sapiens

<400> 557
Gly Gly Ile His Leu Glu Cys Arg Ser Thr Gly Trp Tyr Pro Gln Pro
1 5 10 15

Gln Ile Gln Trp Ser Asn Ala Lys Gly
20 25

<210> 558
<211> 27
<212> PRT
<213> Homo sapiens

<400> 558
Pro Gln Ile Gln Trp Ser Asn Ala Lys Gly Glu Asn Ile Pro Ala Val
1 5 10 15

Glu Ala Pro Val Val Ala Asp Gly Val Gly Leu
20 25

<210> 559
<211> 27
<212> PRT
<213> Homo sapiens

<400> 559
Asn Ile Pro Ala Val Glu Ala Pro Val Val Ala Asp Gly Val Gly Leu
1 5 10 15

Tyr Glu Val Ala Ala Ser Val Ile Met Arg Gly
20 25

<210> 560
<211> 27
<212> PRT
<213> Homo sapiens

<400> 560
Ser Gly Ala Pro Ser Pro Gly Ser Gln Pro Trp Gln Gly Pro Cys Leu
1 5 10 15

243

Ser Cys Cys Cys Phe Ser Pro Glu Pro Val Thr
20 25

<210> 561
<211> 131
<212> PRT
<213> Homo sapiens

<400> 561
Ser Ser Ser Ile Cys Asp His Glu Arg Arg Leu Arg Gly Gly Cys Ile
1 5 10 15

Leu His His Gln Lys Phe Pro Pro Arg Pro Gly Lys Asp Ser Gln His
20 25 30

Phe His Arg Arg Pro Phe Phe Arg Ser Ala Gln Pro Trp Ile Ala Ala
35 40 45

Leu Ala Gly Thr Leu Pro Ile Leu Leu Leu Leu Leu Ala Gly Ala Ser
50 55 60

Tyr Phe Leu Trp Arg Gln Gln Lys Glu Ile Thr Ala Leu Ser Ser Glu
65 70 75 80

Ile Glu Ser Glu Gln Glu Met Lys Glu Met Gly Tyr Ala Ala Thr Glu
85 90 95

Arg Glu Ile Ser Leu Arg Glu Ser Leu Gln Glu Glu Leu Lys Arg Lys
100 105 110

Lys Ile Gln Tyr Leu Thr Arg Gly Glu Glu Ser Ser Ser Asp Thr Asn
115 120 125

Lys Ser Ala
130

<210> 562
<211> 28
<212> PRT
<213> Homo sapiens

<400> 562
Lys Asp Ser Gln His Phe His Arg Arg Pro Phe Phe Arg Ser Ala Gln
1 5 10 15

Pro Trp Ile Ala Ala Leu Ala Gly Thr Leu Pro Ile
20 25

<210> 563
<211> 28
<212> PRT
<213> Homo sapiens

<400> 563

Glu Ile Glu Ser Glu Gln Glu Met Lys Glu Met Gly Tyr Ala Ala Thr
1 5 10 15

Glu Arg Glu Ile Ser Leu Arg Glu Ser Leu Gln Glu
20 25

<210> 564
<211> 33
<212> PRT
<213> Homo sapiens

<400> 564
Val Asn Asn Met Ile Ala Phe Tyr Ser Ala Arg Asp Ser Tyr Val Tyr
1 5 10 15

Pro His Phe Ser Gly Glu Glu Met Leu Gln Met Arg Leu His Leu Val
20 25 30

Lys

<210> 565
<211> 38
<212> PRT
<213> Homo sapiens

<400> 565
Thr Pro Cys Ser Ala Gln Phe Ser Val Leu Gly Pro Ser Gly Pro Ile
1 5 10 15

Leu Ala Met Val Gly Glu Asp Ala Asp Leu Pro Cys His Leu Phe Pro
20 25 30

Thr Met Ser Ala Glu Thr
35

<210> 566
<211> 23
<212> PRT
<213> Homo sapiens

<400> 566
Lys Trp Val Ser Ser Ser Leu Arg Gln Val Val Asn Val Tyr Ala Asp
1 5 10 15

Gly Lys Glu Val Glu Asp Arg
20

<210> 567
<211> 25
<212> PRT
<213> Homo sapiens

<400> 567
Arg Thr Ser Ile Leu Arg Asp Gly Ile Thr Ala Gly Lys Ala Ala Leu
1 5 10 15

Arg Ile His Asn Val Thr Ala Ser Asp
20 25

<210> 568
<211> 23
<212> PRT
<213> Homo sapiens

<400> 568
Cys Tyr Phe Gln Asp Gly Asp Phe Tyr Glu Lys Ala Leu Val Glu Leu
1 5 10 15

Lys Val Ala Ala Leu Gly Ser
20

<210> 569
<211> 23
<212> PRT
<213> Homo sapiens

<400> 569
Gly Tyr Glu Asp Gly Gly Ile His Leu Glu Cys Arg Ser Thr Gly Trp
1 5 10 15

Tyr Pro Gln Pro Gln Ile Gln
20

<210> 570
<211> 23
<212> PRT
<213> Homo sapiens

<400> 570
Asn Ile Pro Ala Val Glu Ala Pro Val Val Ala Asp Gly Val Gly Leu
1 5 10 15

Tyr Glu Val Ala Ala Ser Val
20

<210> 571
<211> 21
<212> PRT
<213> Homo sapiens

<400> 571
Gln Gln Lys Glu Ile Thr Ala Leu Ser Ser Glu Ile Glu Ser Glu Gln
1 5 10 15

Glu Met Lys Glu Met

20

<210> 572
<211> 24
<212> PRT
<213> Homo sapiens

<400> 572
Leu Arg Glu Ser Leu Gln Glu Glu Leu Lys Arg Lys Lys Ile Gln Tyr
1 5 10 15

Leu Thr Arg Gly Glu Glu Ser Ser
20

<210> 573
<211> 13
<212> PRT
<213> Homo sapiens

<400> 573
Gly Glu Glu Met Leu Gln Met Arg Leu His Leu Val Lys
1 5 10

<210> 574
<211> 40
<212> PRT
<213> Homo sapiens

<400> 574
Ser Ala Gln Phe Ser Val Leu Gly Pro Ser Gly Pro Ile Leu Ala Met
1 5 10 15

Val Gly Glu Asp Ala Asp Leu Pro Cys His Leu Phe Pro Thr Met Ser
20 25 30

Ala Glu Thr Met Glu Leu Lys Trp
35 40

<210> 575
<211> 12
<212> PRT
<213> Homo sapiens

<400> 575
Pro Gln Gly Gly Leu Thr Leu Pro Ser Val Trp Gly
1 5 10

<210> 576
<211> 106
<212> PRT
<213> Homo sapiens

<400> 576
Gly Gly Pro Cys His Leu Trp Leu Leu Gly Pro Arg Arg Thr Gln Leu
1 5 10 15

Pro Gly Arg Arg Ala Ser Leu Pro Phe Arg Ser Gln Gly Glu Leu Thr
20 25 30

Gln Ala Phe Leu Leu Gly Leu Trp Lys His Gln Met Pro Ala Leu Thr
35 40 45

Gln Glu Gln Gln Val Arg Ala Glu Arg Arg Arg Glu Ala Val Arg Met
50 55 60

Glu Ile Pro Gly Leu Phe Phe Ala Ser Leu Ala Asn Trp Gly Leu Leu
65 70 75 80

Tyr Arg Thr Ser Gln Asp Phe Ile Ser Pro Tyr Leu Cys Ala Ala Pro
85 90 95

Ser Thr Pro His Pro Pro Leu Gly Gly Pro
100 105

<210> 577
<211> 23
<212> PRT
<213> Homo sapiens

<400> 577
Gly Pro Arg Arg Thr Gln Leu Pro Gly Arg Arg Ala Ser Leu Pro Phe
1 5 10 15

Arg Ser Gln Gly Glu Leu Thr
20

<210> 578
<211> 24
<212> PRT
<213> Homo sapiens

<400> 578
Gln Met Pro Ala Leu Thr Gln Glu Gln Gln Val Arg Ala Glu Arg Arg
1 5 10 15

Arg Glu Ala Val Arg Met Glu Ile
20

<210> 579
<211> 25
<212> PRT
<213> Homo sapiens

<400> 579
Ala Asn Trp Gly Leu Leu Tyr Arg Thr Ser Gln Asp Phe Ile Ser Pro
1 5 10 15

Tyr Leu Cys Ala Ala Pro Ser Thr Pro
20 25

<210> 580
<211> 34
<212> PRT
<213> Homo sapiens

<400> 580
Leu Ser Phe Lys Asp Lys Ser Thr Tyr Ile Glu Ser Ser Thr Lys Val
1 5 10 15

Tyr Asp Asp Met Ala Phe Arg Tyr Leu Ser Trp Ile Leu Phe Pro Leu
20 25 30

Leu Gly

<210> 581
<211> 31
<212> PRT
<213> Homo sapiens

<400> 581
Leu Leu Thr Phe Gly Phe Ile Thr Met Thr Pro Gln Leu Phe Ile Asn
1 5 10 15

Tyr Lys Leu Lys Ser Val Ala His Leu Pro Trp Arg Met Leu Thr
20 25 30

<210> 582
<211> 30
<212> PRT
<213> Homo sapiens

<400> 582
Thr Tyr Lys Ala Leu Asn Thr Phe Ile Asp Asp Leu Phe Ala Phe Val
1 5 10 15

Ile Lys Met Pro Val Met Tyr Arg Ile Gly Cys Leu Arg Asp
20 25 30

<210> 583
<211> 30
<212> PRT
<213> Homo sapiens

<400> 583
Asp Val Val Phe Phe Ile Tyr Leu Tyr Gln Arg Trp Ile Tyr Arg Val
1 5 10 15

Asp Pro Thr Arg Val Asn Glu Phe Gly Met Ser Gly Glu Asp

20 25 30

<210> 584
<211> 44
<212> PRT
<213> Homo sapiens

<400> 584
Val Ala Gly Ile Phe Pro Arg Leu Ser Phe Lys Asp Lys Ser Thr Tyr
1 5 10 15

Ile Glu Ser Ser Thr Lys Val Tyr Asp Asp Met Ala Phe Arg Tyr Leu
20 25 30

Ser Trp Ile Leu Phe Pro Leu Leu Gly Cys Tyr Ala
35 40

<210> 585
<211> 19
<212> PRT
<213> Homo sapiens

<400> 585
Trp Ala Ala Met Pro Ser Thr Val Phe Cys Thr Trp Ser Thr Arg Ala
1 5 10 15

Gly Thr Pro

<210> 586
<211> 28
<212> PRT
<213> Homo sapiens

<400> 586
Pro Trp Val Ala Gly Ile Phe Pro Arg Leu Ser Phe Lys Asp Lys Ser
1 5 10 15

Thr Tyr Ile Glu Ser Ser Thr Lys Val Tyr Asp Asp
20 25

<210> 587
<211> 88
<212> PRT
<213> Homo sapiens

<400> 587
Ala Gly Glu Asp Ser Cys His Pro Val Leu Ser Val Gln Pro Asp Val
1 5 10 15

His Asp Leu Gly Trp Gln Glu Ser Ser Pro Ala Tyr Pro Ser Arg Thr
20 25 30

250

Ser Pro Arg Ile Ser Ser Pro Arg Pro Lys Cys Met Met Ile Trp His
35 40 45

Ser Gly Thr Cys Pro Gly Ser Ser Ser Arg Ser Trp Ala Ala Met Pro
50 55 60

Ser Thr Val Phe Cys Thr Trp Ser Thr Arg Ala Gly Thr Pro Gly Cys
65 70 75 80

Ser Ala Cys Ser Thr Ala Ser Cys
85

<210> 588
<211> 30
<212> PRT
<213> Homo sapiens

<400> 588
Leu Ser Val Gln Pro Asp Val His Asp Leu Gly Trp Gln Glu Ser Ser
1 5 10 15

Pro Ala Tyr Pro Ser Arg Thr Ser Pro Arg Ile Ser Ser Pro
20 25 30

<210> 589
<211> 25
<212> PRT
<213> Homo sapiens

<400> 589
Gly Ser Ser Ser Arg Ser Trp Ala Ala Met Pro Ser Thr Val Phe Cys
1 5 10 15

Thr Trp Ser Thr Arg Ala Gly Thr Pro
20 25

<210> 590
<211> 22
<212> PRT
<213> Homo sapiens

<400> 590
Cys Tyr Ala Val Tyr Ser Leu Leu Tyr Leu Glu His Lys Gly Trp Tyr
1 5 10 15

Ser Trp Val Leu Ser Met
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<210> 591
<211> 12
<212> PRT
<213> Homo sapiens

<400> 591
Leu Gly Glu Phe Leu Ser Ser Gln Cys Phe Leu Pro
1 5 10

<210> 592
<211> 20
<212> PRT
<213> Homo sapiens

<400> 592
Arg Ser Arg Arg Asn Arg Val Ala Met Gly Met Trp Ala Ser Leu Asp
1 5 10 15

Ala Leu Trp Glu
20

<210> 593
<211> 92
<212> PRT
<213> Homo sapiens

<400> 593
Pro Arg Val Arg Cys Gln Gln Arg Ala Glu Gly Gly Met Gly Ala Gly
1 5 10 15

Ile Gly Val Gly Pro Ser Glu Arg Thr Asp Ile Ala Val Thr Pro Arg
20 25 30

Gly Arg Ser Glu Gly Ala Ser Val Gly Val Ala Pro Val His Ala Glu
35 40 45

Gly Ala Gly Gly Thr Gly Trp Pro Trp Gly Cys Gly His Arg Trp Thr
50 55 60

Leu Cys Gly Arg Cys Arg Pro Arg Ser Val Ser Ser Gly Pro Cys Cys
65 70 75 80

Ser Phe Pro Gly Gln Cys Ile Phe Gly Arg Pro Ser
85 90

<210> 594
<211> 24
<212> PRT
<213> Homo sapiens

<400> 594
Gly Gly Met Gly Ala Gly Ile Gly Val Gly Pro Ser Glu Arg Thr Asp
1 5 10 15

Ile Ala Val Thr Pro Arg Gly Arg
20

<210> 595

<211> 26
<212> PRT
<213> Homo sapiens

<400> 595
Gly Cys Gly His Arg Trp Thr Leu Cys Gly Arg Cys Arg Pro Arg Ser
1 5 10 15

Val Ser Ser Gly Pro Cys Cys Ser Phe Pro
20 25

<210> 596
<211> 24
<212> PRT
<213> Homo sapiens

<400> 596
Lys Lys His Gly Phe Asn Gln Gln Thr Leu Gly Phe Phe Thr Trp Lys
1 5 10 15

Tyr Asn Lys Asn Lys Asn Leu Val
20

<210> 597
<211> 21
<212> PRT
<213> Homo sapiens

<400> 597
Pro Lys Leu Leu Pro Cys Ser Pro Ala Glu Gly His Thr Ser Leu Gly
1 5 10 15

Pro Leu Leu Pro Phe
20

<210> 598
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 598
Ala Ser Leu Glu Leu Xaa Pro Ser Lys Ser Gln Leu Ser Thr Glu Trp
1 5 10 15

Gly Phe Thr Trp Ile Val Gly Leu Gly Met Ser Pro Ser Thr Ala Leu
20 25 30

Trp Thr Glu Cys Thr Cys Thr Pro Phe Leu Val Leu Leu Ser His Ala
35 40 45

Ser Gly His Phe Phe Trp Leu Ser Pro Leu Ala Ser Leu Val Ile Pro
50 55 60

Pro Val Thr Asp Arg Lys
65 70

<210> 599
<211> 32
<212> PRT
<213> Homo sapiens

<400> 599
Trp Gly Phe Thr Trp Ile Val Gly Leu Gly Met Ser Pro Ser Thr Ala
1 5 10 15

Leu Trp Thr Glu Cys Thr Cys Thr Pro Phe Leu Val Leu Leu Ser His
20 25 30

<210> 600
<211> 106
<212> PRT
<213> Homo sapiens

<400> 600
Val Ala Val Gly Val Cys Arg Glu Asp Val Met Gly Ile Thr Asp Arg
1 5 10 15

Ser Lys Met Ser Pro Asp Val Gly Ile Trp Ala Ile Tyr Trp Ser Ala
20 25 30

Ala Gly Tyr Trp Pro Leu Ile Gly Phe Pro Gly Thr Pro Thr Gln Gln
35 40 45

Glu Pro Ala Leu His Arg Val Gly Val Tyr Leu Asp Arg Gly Thr Gly
50 55 60

Asn Val Ser Phe Tyr Ser Ala Val Asp Gly Val His Leu His Thr Phe
65 70 75 80

Ser Cys Ser Ser Val Ser Arg Leu Arg Pro Phe Phe Leu Val Glu Ser
85 90 95

Ile Ser Ile Phe Ser His Ser Thr Ser Asp
100 105

<210> 601
<211> 27
<212> PRT
<213> Homo sapiens

<400> 601
Ile Thr Asp Arg Ser Lys Met Ser Pro Asp Val Gly Ile Trp Ala Ile
1 5 10 15

Tyr Trp Ser Ala Ala Gly Tyr Trp Pro Leu Ile
20 25

<210> 602
<211> 30
<212> PRT
<213> Homo sapiens

<400> 602
Arg Gly Thr Gly Asn Val Ser Phe Tyr Ser Ala Val Asp Gly Val His
1 5 10 15

Leu His Thr Phe Ser Cys Ser Ser Val Ser Arg Leu Arg Pro
20 25 30

<210> 603
<211> 11
<212> PRT
<213> Homo sapiens

<400> 603
Gly Thr Arg Gly Leu Gln Asn His Arg Thr Glu
1 5 10

<210> 604
<211> 6
<212> PRT
<213> Homo sapiens

<400> 604
Glu Leu Ser Gly Leu Gly
1 5

<210> 605
<211> 6
<212> PRT
<213> Homo sapiens

<400> 605
Met Asp Asp Ile Lys Ile
1 5

<210> 606
<211> 57
<212> PRT
<213> Homo sapiens

<400> 606

255

Asn Phe Cys Val Ser Lys Asn Thr Phe Asn Arg Val Lys Arg Pro Ile
1 5 10 15

Lys Trp Val Lys Ile Phe Ala Asn Asp Ile Ser Cys Lys Arg Leu Ile
20 25 30

Ser Arg Ile His Lys Glu Ile Leu Pro Phe Asn Asn Lys Lys Gln Pro
35 40 45

Asp Phe Lys Val Lys Lys Ser Arg Lys
50 55

<210> 607
<211> 30
<212> PRT
<213> Homo sapiens

<400> 607
Phe Asn Arg Val Lys Arg Pro Ile Lys Trp Val Lys Ile Phe Ala Asn
1 5 10 15

Asp Ile Ser Cys Lys Arg Leu Ile Ser Arg Ile His Lys Glu
20 25 30

<210> 608
<211> 15
<212> PRT
<213> Homo sapiens

<400> 608
Glu Thr Gln Met Ala Asn Lys Tyr Met Lys Arg Cys Ser Thr Leu
1 5 10 15

<210> 609
<211> 59
<212> PRT
<213> Homo sapiens

<400> 609
Val Ile Arg Glu Leu Gln Val Lys Ala Thr Arg Arg Cys His Tyr Thr
1 5 10 15

Pro Ile Lys Trp Ser Lys Ser Lys Thr Leu Ile Ser Ser Asn Ala Asp
20 25 30

Glu Tyr Val Glu Pro Thr Arg Thr Leu Ile His Cys Trp Trp Lys Cys
35 40 45

Lys Ile Val Gln Pro Leu Cys Lys Thr Ala Trp
50 55

<210> 610
<211> 22

<212> PRT
<213> Homo sapiens

<400> 610
Ala Thr Arg Arg Cys His Tyr Thr Pro Ile Lys Trp Ser Lys Ser Lys
1 5 10 15

Thr Leu Ile Ser Ser Asn
20

<210> 611
<211> 64
<212> PRT
<213> Homo sapiens

<400> 611
Glu Leu Ser Gly Leu Val Ile Ile Thr Ala Trp Ile Ile Leu Cys His
1 5 10 15

Ser Ser Ser Lys Asn Pro Val Gly Gly Arg Ile Gln Leu Ala Ile Ala
20 25 30

Ile Val Ile Thr Leu Phe Pro Phe Ile Ser Trp Val Tyr Ile Tyr Ile
35 40 45

Asn Lys Glu Met Arg Ser Ser Trp Pro Thr His Cys Lys Thr Val Ile
50 55 60

<210> 612
<211> 57
<212> PRT
<213> Homo sapiens

<400> 612
Gln Cys Pro Gln Gly Thr Glu Thr Glu Ala Gly Val Ser Val Pro Pro
1 5 10 15

Arg Lys Glu Gly Gly Gly Pro Tyr Val Ala Gly Leu Thr Ala Pro His
20 25 30

Val Ala Gly Leu Thr Ala Pro Arg Arg Val Leu Arg Ala Met Ala Pro
35 40 45

Ala Leu Trp Arg Ala Cys Asn Gly Leu
50 55

<210> 613
<211> 32
<212> PRT
<213> Homo sapiens

<400> 613
His Ser Ser Ser Lys Asn Pro Val Gly Gly Arg Ile Gln Leu Ala Ile
1 5 10 15

Ala Ile Val Ile Thr Leu Phe Pro Phe Ile Ser Trp Val Tyr Ile Tyr
20 25 30

<210> 614
<211> 32
<212> PRT
<213> Homo sapiens

<400> 614
Arg Lys Glu Gly Gly Gly Pro Tyr Val Ala Gly Leu Thr Ala Pro His
1 5 10 15

Val Ala Gly Leu Thr Ala Pro Arg Arg Val Leu Arg Ala Met Ala Pro
20 25 30

<210> 615
<211> 32
<212> PRT
<213> Homo sapiens

<220>
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<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 615
Pro Gly Arg Pro Thr Arg Pro Ala Xaa Ala Gly Leu Ser Ser Gly Gly
1 5 10 15

Ala Ala Gln Glu Ala Pro Gln Ala Asp Pro Arg Pro Trp Leu Ala Arg
20 25 30

<210> 616
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 616
His Tyr Xaa Ser Thr Pro Gly Arg Val Pro Val Arg Gln Phe Ala Ala
1 5 10 15

Ala Ser Thr Ser Gly Gly Pro Trp Val Pro Gly Gly Xaa Leu Glu Ala
20 25 30

Pro Phe Gln Val Ala Pro Ser Leu Ser His Ser Thr Pro Val Phe Pro
35 40 45

Gly Leu Ile
50

<210> 617
<211> 22
<212> PRT
<213> Homo sapiens

<400> 617
Ala Arg Gly Lys Tyr Glu Ser Ala Gln Pro Gly Gly Thr Gln Pro Glu
1 5 10 15

Pro Gly Leu Gly Ala Arg
20

<210> 618
<211> 24
<212> PRT
<213> Homo sapiens

<400> 618
Ser Cys Gly Ser Ser Arg Arg Ser Ala Lys Arg Ser Leu Thr Leu Lys
1 5 10 15

Leu Ile Asp Phe Ser His Arg Ile
20

<210> 619
<211> 52
<212> PRT
<213> Homo sapiens

<400> 619
His Tyr Phe Leu Arg Thr Val Ser Gly Leu Ser Val Val Pro Val Ser
1 5 10 15

Leu Arg Cys Cys Met Cys Pro Pro Pro Cys Thr Gly Pro Ala Pro Ala
20 25 30

Thr Ala His Ser Pro Phe Asp Pro Pro Ala Leu Pro Ile Gln Phe Glu
35 40 45

Tyr Gln Gln Ala
50

<210> 620
<211> 45
<212> PRT
<213> Homo sapiens

<400> 620
Gln Leu Glu Ala Glu Ile Glu Asn Leu Ser Trp Lys Val Glu Arg Ala
1 5 10 15

Asp Ser Tyr Asp Arg Gly Asp Leu Glu Asn Gln Met His Ile Ala Glu
20 25 30

Gln Arg Arg Arg Thr Leu Leu Lys Asp Phe His Asp Thr
35 40 45

<210> 621
<211> 24
<212> PRT
<213> Homo sapiens

<400> 621
Val Pro Val Ser Leu Arg Cys Cys Met Cys Pro Pro Pro Cys Thr Gly
1 5 10 15

Pro Ala Pro Ala Thr Ala His Ser
20

<210> 622
<211> 25
<212> PRT
<213> Homo sapiens

<400> 622
Ser Trp Lys Val Glu Arg Ala Asp Ser Tyr Asp Arg Gly Asp Leu Glu
1 5 10 15

Asn Gln Met His Ile Ala Glu Gln Arg
20 25

<210> 623
<211> 227
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 623
His Glu Ala Trp Leu Arg Ser Ala Gly Thr Arg Glu Pro Pro Arg Glu
1 5 10 15

Gln Arg Thr Arg Arg Arg Gln Thr Ala Gln Leu Ala Leu Gln Val Pro
20 25 30

Ala Pro Ser Arg Thr Pro Pro Met Ala Thr Asp Val Phe Asn Ser Lys
35 40 45

Asn Leu Ala Val Xaa Ala Gln Lys Lys Ile Leu Gly Lys Met Val Ser
50 55 60

Lys Ser Ile Ala Thr Thr Leu Ile Asp Asp Thr Ser Ser Glu Val Leu
65 70 75 80

Asp Glu Leu Tyr Arg Val Thr Arg Glu Tyr Thr Gln Asn Lys Lys Glu
85 90 95

Ala Glu Lys Ile Ile Lys Asn Leu Ile Lys Thr Val Ile Lys Leu Ala
100 105 110

Ile Leu Tyr Arg Asn Asn Gln Phe Asn Gln Asp Glu Leu Ala Leu Met
115 120 125

Glu Lys Phe Lys Lys Lys Val His Gln Leu Ala Met Thr Val Val Ser
130 135 140

Phe His Gln Val Asp Tyr Thr Phe Asp Arg Asn Val Leu Ser Arg Leu
145 150 155 160

Leu Asn Glu Cys Arg Glu Met Leu His Gln Ile Ile Gln Arg His Leu
165 170 175

Thr Ala Lys Ser His Gly Arg Val Asn Asn Val Phe Asp His Phe Ser
180 185 190

Asp Cys Glu Phe Leu Ala Ala Leu Tyr Asn Pro Phe Gly Asn Phe Lys
195 200 205

Pro His Leu Gln Lys Leu Cys Asp Gly Ile Asn Lys Met Leu Asp Glu
210 215 220

Glu Asn Ile
225

<210> 624
<211> 52
<212> PRT
<213> Homo sapiens

<400> 624
His Glu Ala Trp Leu Arg Ser Ala Gly Thr Arg Glu Pro Pro Arg Glu

261

1 5 10 15

Gln Arg Thr Arg Arg Arg Gln Thr Ala Gln Leu Ala Leu Gln Val Pro
20 25 30

Ala Pro Ser Arg Thr Pro Pro Met Ala Thr Asp Val Phe Asn Ser Lys
35 40 45

Asn Leu Ala Val
50

<210> 625
<211> 49
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 625
Xaa Ala Gln Lys Lys Ile Leu Gly Lys Met Val Ser Lys Ser Ile Ala
1 5 10 15

Thr Thr Leu Ile Asp Asp Thr Ser Ser Glu Val Leu Asp Glu Leu Tyr
20 25 30

Arg Val Thr Arg Glu Tyr Thr Gln Asn Lys Lys Glu Ala Glu Lys Ile
35 40 45

Ile

<210> 626
<211> 51
<212> PRT
<213> Homo sapiens

<400> 626
Lys Asn Leu Ile Lys Thr Val Ile Lys Leu Ala Ile Leu Tyr Arg Asn
1 5 10 15

Asn Gln Phe Asn Gln Asp Glu Leu Ala Leu Met Glu Lys Phe Lys Lys
20 25 30

Lys Val His Gln Leu Ala Met Thr Val Val Ser Phe His Gln Val Asp
35 40 45

Tyr Thr Phe
50

<210> 627
<211> 52

<212> PRT
<213> Homo sapiens

<400> 627
Asp Arg Asn Val Leu Ser Arg Leu Leu Asn Glu Cys Arg Glu Met Leu
1 5 10 15

His Gln Ile Ile Gln Arg His Leu Thr Ala Lys Ser His Gly Arg Val
20 25 30

Asn Asn Val Phe Asp His Phe Ser Asp Cys Glu Phe Leu Ala Ala Leu
35 40 45

Tyr Asn Pro Phe
50

<210> 628
<211> 23
<212> PRT
<213> Homo sapiens

<400> 628
Gly Asn Phe Lys Pro His Leu Gln Lys Leu Cys Asp Gly Ile Asn Lys
1 5 10 15

Met Leu Asp Glu Glu Asn Ile
20

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/27059

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :C07H 21/00; C12N 1/15, 1/21, 5/10, 15/11, 15/63
US CL :435/91.41, 320.1, 325, 252.3, 254.11; 536/23.1, 23.5, 24.31

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/91.41, 320.1, 325, 252.3, 254.11; 536/23.1, 23.5, 24.31

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

GENBANK, EMBL, SWISS-PROT, SPTREMBL, PIR,
searched: SEQ ID NO: 11-20 & 125-134

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AA133381, HILLIER et al. 'WashU-Merck EST Project', complete record, 27 November 1996.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. T12400, LIEW et al. 'A catalogue of genes in the cardiovascular system as identified by expressed sequence tags', complete record, 27 November 1996.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AA496982, HILLIER et al. 'WashU-Merck EST Project 1997', complete record, 12 August 1997.	1, 7-10

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"B"	earlier document published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search	Date of mailing of the international search report
02 MARCH 1999	23 MAR 1999

Name and mailing address of the ISA/US	Authorized officer
Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	SCOTT D. PRIEBE
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Form PCT/ISA/210 (second sheet)(July 1992)*

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/27059

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. U14626, D'ALESSIO et al. 'Cloning vector pSVSport1', complete record, 24 May 1995.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AJ000730, SPERANDEO et al. 'The full cDNA for the human cationic amino acid transporter 3 (HCAT3)', complete record, 02 December 1997.	1
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. R31044, HILLIER et al. 'The WashU-Merck EST Project', complete record, 28 April 1995.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AA446873, HILLIER et al. 'WashU-Merck EST Project 1997', complete record, 03 June 1997.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AA135715, HILLIER et al. 'WashU-Merck EST Project', complete record, 14 May 1997.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AA194015, HILLIER et al. 'WashU-Merck EST Project', complete record, 19 May 1997.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. R72850, HILLIER et al. 'The WashU-Merck EST Project', complete record, 02 June 1995.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. T60940, HILLIER et al. 'WashU-Merck EST Project', complete record, 13 February 1995.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. H86863, HILLIER et al. 'The WashU-Merck EST Project', complete record, 21 November 1995.	1, 7-10

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/27059

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-10, 21

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(1))(July 1992)★

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/27059

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING
This ISA found multiple inventions as follows:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Groups I-XXVII, claim(s) 1-10 and 21, drawn to a polynucleotide, vector comprising same, first claimed method of use, i.e. using polynucleotide to make a cell, and the cell made by the process. Claims 1-10 and 21 recite 114 independent polynucleotides (SEQ ID NO: 11-124 or encoding SEQ ID NO: 125-238). Group I consists of the first ten polynucleotides (SEQ ID NOs 11-20 or encoding SEQ ID NOs 125-134). Each of groups II-XXVII consists of up to four of the remaining 104 polynucleotides, in order.

Groups XXVIII-CXLI, claim(s) 11, 12, 14-16 and 17 (first part), drawn to a polypeptide, a method of making the polypeptide and first claimed method of use, i.e. in treatment. These claims recite 114 independent polypeptides, each of groups XXVIII-CXLI consists of a single polypeptide as set forth in SEQ ID NOs 125-238, respectively.

Groups CXLI-CCLV, claim(s) 13 and 19, drawn to an antibody to a polypeptide and the first claimed method of using same. These claims recite 114 independent antibodies to 114 independent polypeptides, each of groups CXLI-CCLV consists an antibody against a single polypeptide as set forth in SEQ ID NOs 125-238, respectively.

Groups CCLVI-CCLXXXII, claim(s) 17(second part), drawn to an additional method of using a polynucleotide.Group CCLVI consists of methods reciting the first ten polynucleotides (SEQ ID NOs 11-20 or encoding SEQ ID NOs 125-134). Each of groups CCLVII-CCLXXXII pertains to up to four of the remaining 104 polynucleotides, in order.

Groups CCLXXXIII-CCCIX, claim(s) 18, drawn to a second additional method of using a polynucleotide. Group CCLXXXIII consists of methods reciting the first ten polynucleotides (SEQ ID NOs 11-20 or encoding SEQ ID NOs 125-134). Each of groups CCLXXXIV-CCCIX pertains to up to four of the remaining 104 polynucleotides, in order.

Groups CCCX-CDXXIII, claim(s) 20, drawn to an additional method of using the polypeptide. These claims recite 114 independent methods of using 114 independent polypeptides, each of groups CCCX-CDXXIII consists an antibody against a single polypeptide as set forth in SEQ ID NOs 125-238, respectively.

Groups CDXXIV-CDL, claim 22, drawn to a third additional method of using a polynucleotide. Group CDXXIV consists of methods reciting the first ten polynucleotides (SEQ ID NOs 11-20 or encoding SEQ ID NOs 125-134). Each of groups CDXXV-CDL pertains to up to four of the remaining 53 polynucleotides, in order.

Claim 23 is unsearchable and cannot be grouped as it is drawn to unknown and unspecified compounds.

The inventions listed as Groups I-CDL do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Each of the corresponding polynucleotides, polypeptides and antibodies are independent products, with different uses and being structurally, biochemically and biologically different products. Additional or alternate methods of use are claimed for individual polynucleotides and polypeptides. 37 CFR 1.475(b) does not provide for unity of invention of more than 1 product or more than one method of using a product as a combination of invention having unity of invention. However, with respect to groups drawn to independent polynucleotides or alternate methods of using same recited in the alternative, in accordance with 1192 O.G. 68 (19 November 1966) applicant is entitled to an initial search of inventions pertaining to the first ten independent polynucleotides recited, and may elect to pay an additional fee for each search of up to four additional independent polynucleotides. For additional method of using each of the independent polynucleotides, applicant may further elect to pay an additional fee for an additional search involving the first ten polynucleotides and each additional search involving up to four additional polynucleotides. With respect to groups pertaining to independent polypeptides or antibodies to the independent polypeptides, each product or method of use is an additional invention. An additional fee must be paid for search of each additional invention relating to polypeptides or antibodies against same. With respect to the relationship between the claimed polynucleotides and the claimed polypeptides, there is no one-to-one correspondence, i.e. no corresponding scope, between claims drawn to polynucleotides and their use and those drawn to polypeptides, antibodies and their use. Consequently, there is no special technical feature linking the polynucleotides and the polypeptides or antibodies claimed.